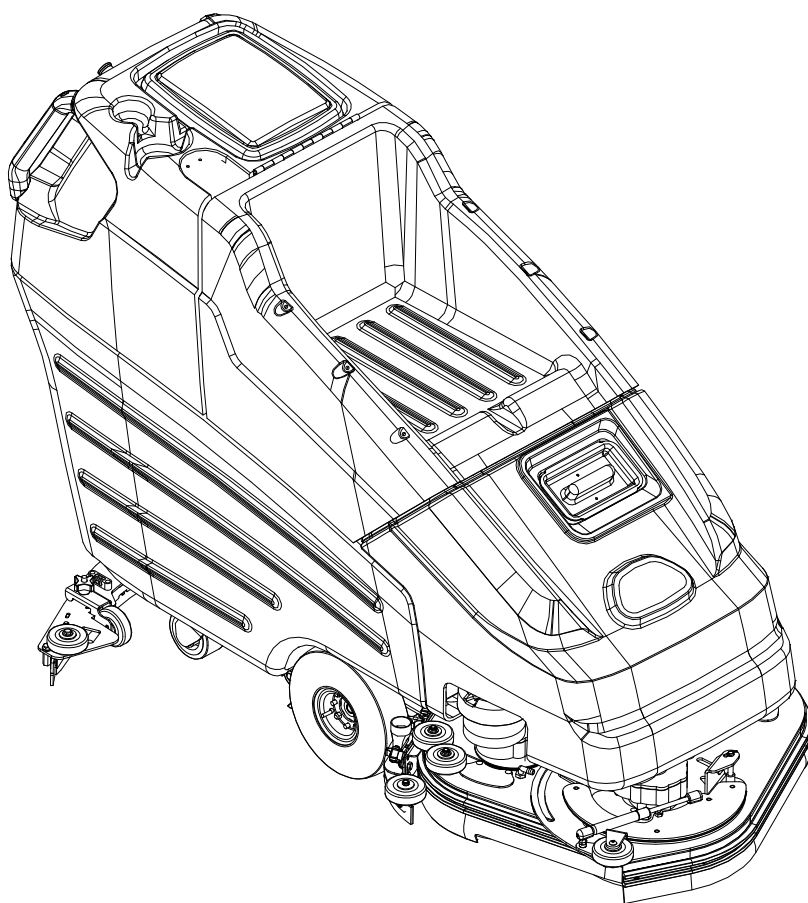


Operating instructions (ENG)

MODELS: SCX364
10052410



Read these instructions before using the machine.



Model:	_____
Date of Purchase:	_____
Serial Number:	_____
Dealer:	_____
Address:	_____
Phone Number:	_____
Sales Representative:	_____

Overview

The Saber Cutter is a battery powered, self-propelled, hard floor scrubber intended for commercial use. The appliance applies a cleaning solution onto a hard floor, scrubs the floor with brushes or pads, and then vacuums the soiled water back into the recovery tank.

Warranty Registration

Thank you for purchasing a Windsor product. Warranty registration is quick and easy. Your registration will allow us to serve you better over the lifetime of the product.

To register your product go to :
www.windsorind.com/WarrantyRegistration.aspx

For customer assistance:
1-800-444-7654



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How To Use This Manual

This manual contains the following sections:

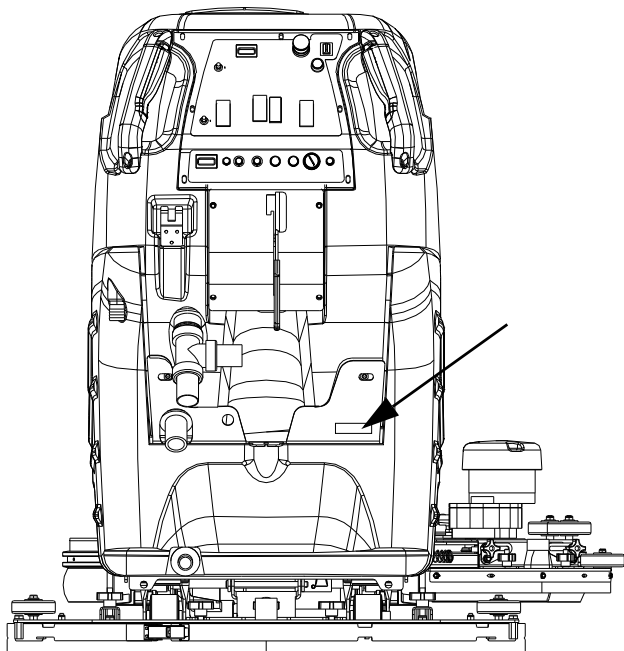
- How to Use This Manual
- Safety
- Operations
- Maintenance
- Parts List

The HOW TO USE THIS MANUAL section will tell you how to find important information for ordering correct repair parts.

Parts may be ordered from authorized dealers. When placing an order for parts, the machine model and machine serial number are important. Refer to the MACHINE DATA box which is filled out during the installation of your machine. The MACHINE DATA box is located on the inside of the front cover of this manual.

Model: _____
Date of Purchase: _____
Serial Number: _____
Dealer: _____
Address: _____
Phone Number: _____
Sales Representative: _____

The model and serial number of your machine is located on the back of the machine.



The SAFETY section contains important information regarding hazardous or unsafe practices of the machine. Levels of hazards are identified that could result in product damage, personal injury, or severe injury resulting in death.

The OPERATIONS section is to familiarize the operator with the operation and function of the machine.

The MAINTENANCE section contains preventive maintenance to keep the machine and its components in good working condition. They are listed in this general order:

- Service Schedule
- Batteries
- Rear Squeegee
- Scrub Brushes
- Traction Motor
- Vacuum Motor
- Actuators
- Front Squeegee
- Troubleshooting

The PARTS LIST section contains assembled parts illustrations and corresponding parts list. The parts lists include a number of columns of information:

- **REF** – column refers to the reference number on the parts illustration.
- **PART NO.** – column lists the part number for the part.
- **QTY** – column lists the quantity of the part used in that area of the machine.
- **DESCRIPTION** – column is a brief description of the part.
- **SERIAL NO. FROM** – If this column has an (*) and a Reference number, see the SERIAL NUMBERS page in the back of your manual. If column has two asterisk (**), call manufacturer for serial number. The serial number indicates the first machine the part number is applicable to. The main illustration shows the most current design of the machine. When a boxed illustration is shown, it displays the older design.
- **NOTES** – column for information not noted by the other columns.

NOTE: If a service or option kit is installed on your machine, be sure to keep the KIT INSTRUCTIONS which came with the kit. It contains replacement parts numbers needed for ordering future parts.

NOTE: The manual part number is located on the lower left corner of the front cover.

Important Safety Instructions

When using an battery powered appliance, basic precaution must always be followed, including the following:

READ ALL INSTRUCTIONS BEFORE USING THIS MACHINE.

⚠ WARNING: To reduce the risk of fire, electric shock, or injury:

Use only indoors. Do not use outdoors or expose to rain.

Use only as described in this manual. Use only manufacturer's recommended components and attachments.

If the machine is **not working properly**, has been dropped, damaged, left outdoors, or dropped into water, return it to an authorized service center.

Do not operate the machine with any openings blocked. Keep openings free of debris that may reduce airflow.

This machine **is not** suitable for picking up hazardous dust.

Machine can cause a fire when operating near flammable vapors or materials. Do not operate this machine near flammable fluids, dust or vapors.

This machine is suitable for commercial use, for example in hotels, schools, hospitals, factories, shops and offices for more than normal housekeeping purposes.

Maintenance and repairs **must be done** by qualified personnel.

If foam or liquid comes out of machine, **switch off immediately**.

Disconnect battery before cleaning or servicing.

Before the machine is discarded, the batteries **must be removed** and properly disposed of.

Make sure all warning and caution labels **are legible and properly attached** to the machine.

During operation, attention shall be paid to other persons, especially children.

Before use all covers and doors shall be put in the positions specified in the instructions.

When leaving unattended, secure against unintentional movement.

The machine shall only be operated by instructed and authorized persons.

When leaving unattended, switch off or lock the main power switch to prevent unauthorized use.

Only chemicals recommended by the manufacturer shall be used.

This appliance has been designed for use with the brushes specified by the manufacturer. The fitting of other brushes may affect its safety.

Do not use on surfaces having a gradient exceeding 2% unless the optional parking brake is installed on the machine.

READ AND SAVE THESE INSTRUCTIONS

The following symbols are used throughout this guide as indicated in their descriptions:

Hazard Intensity Level

There are three levels of hazard intensity identified by signal words -**WARNING** and **CAUTION** and **FOR SAFETY**. The level of hazard intensity is determined by the following definitions:

WARNING:

WARNING - Hazards or unsafe practices which **COULD** result in severe personal injury or death.

CAUTION:

CAUTION - Hazards or unsafe practices which could result in minor personal injury or product or property damage.

FOR SAFETY: To Identify actions which must be followed for safe operation of equipment.

Report machine damage or faulty operation immediately. Do not use the machine if it is not in proper operating condition. Following is information that signals some potentially dangerous conditions to the operator or the equipment. Read this information carefully. Know when these conditions can exist. Locate all safety devices on the machine. Please take the necessary steps to train the machine operating personnel.

FOR SAFETY:

DO NOT OPERATE MACHINE:

Unless Trained and Authorized.

Unless Operation Guide is Read and understood.

In Flammable or Explosive areas.

In areas with possible falling objects.

WHEN SERVICING MACHINE:

Avoid moving parts. Do not wear loose clothing; jackets, shirts, or sleeves when working on the machine.

Use Windsor approved replacement parts.

WARNING:

Batteries emit hydrogen gas. Explosion or fire can result. Keep sparks and open flame away. Keep top cover in raised position when charging. Keep sparks and flames away from the batteries. Do not smoke around batteries.

WARNING:

Disconnect batteries before working on machine. Only qualified personnel should work inside machine.

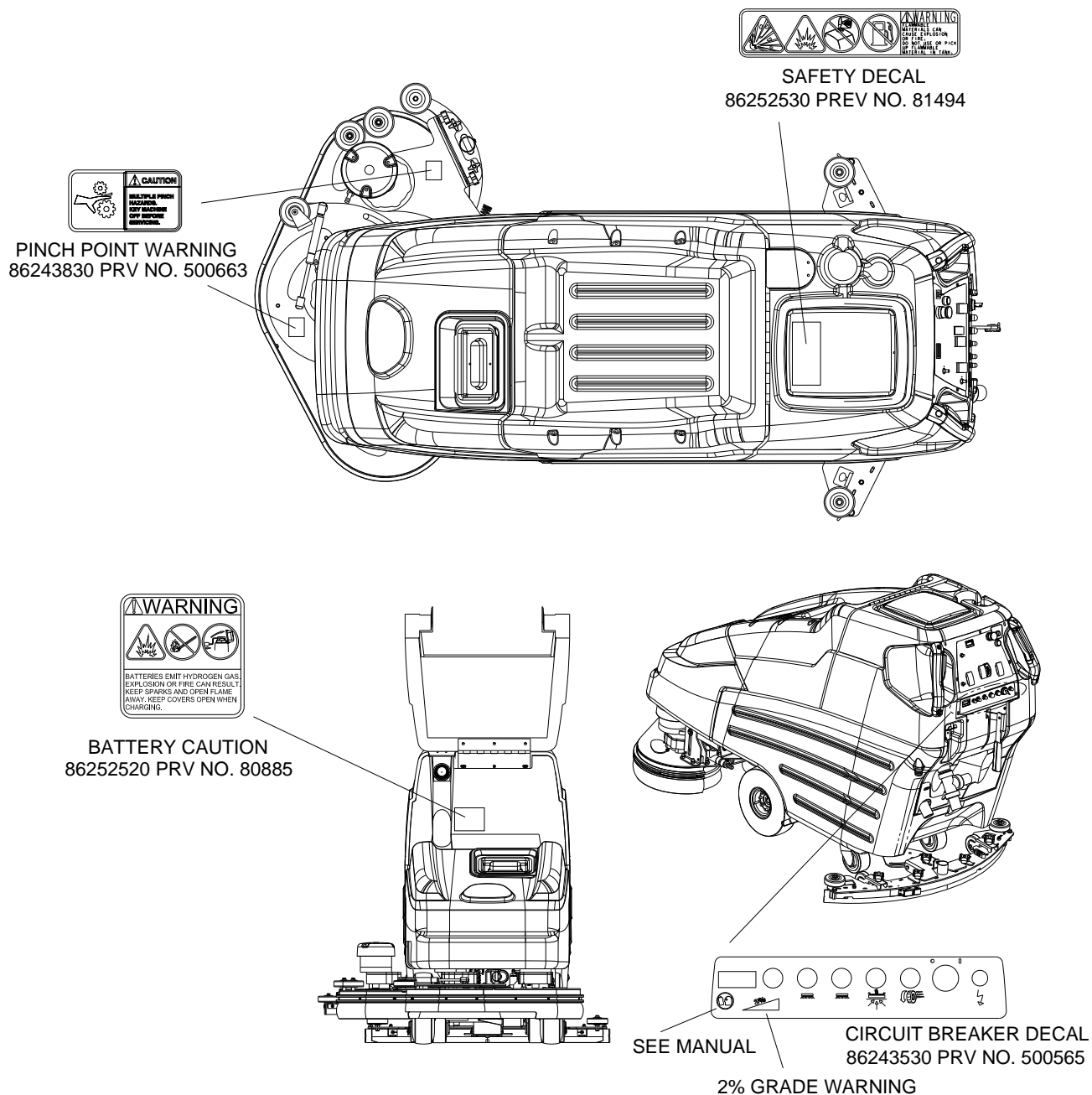
Always wear eye protection and protective clothing when working on or near batteries. Avoid skin contact with the acid contained in the batteries.

WARNING:

Never allow metal to lie across battery tops.

Safety Label Location

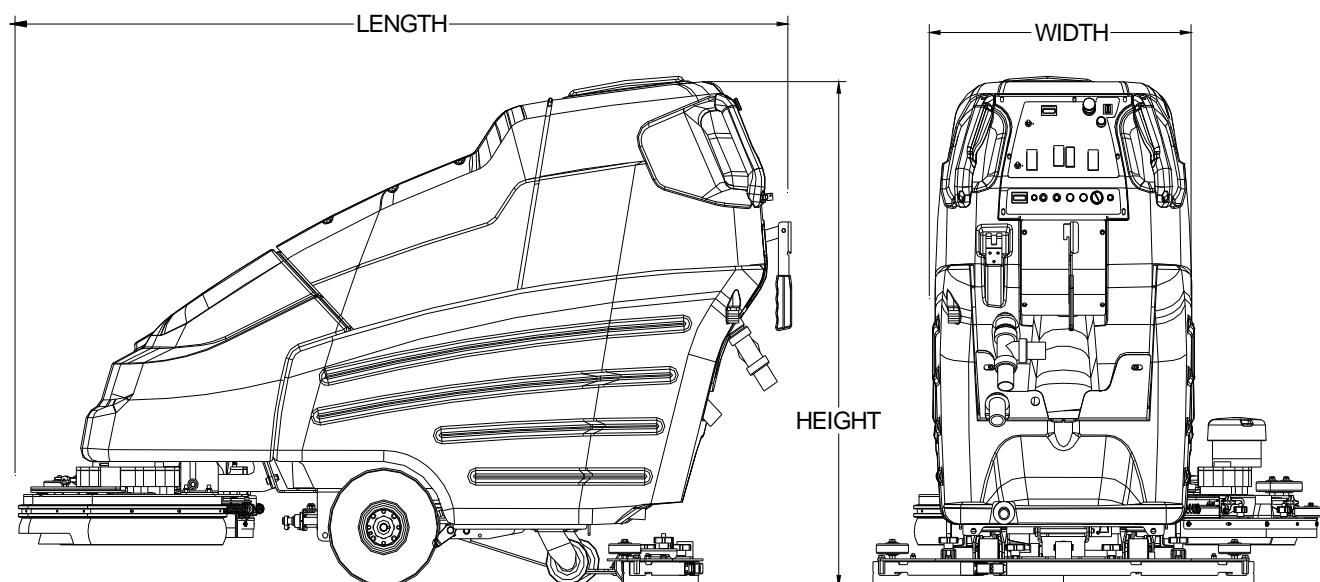
NOTE: These drawings indicate the location of safety labels on the machine. If at any time the labels become illegible, promptly replace them.



Technical Specifications

ITEM	DIMENSION/CAPACITY
Nominal power	1440 Watts
Rated Voltage	24VDC
Rated Amperage	60 Amps
Batteries	4 X 6 Volt 250-305-335AH @ 20 hr rate
Scrub Brush Motors	.33 hp (0.25 Kw)
Vacuum Motor	.75 hp (0.56 Kw)
Propelling Motor	.3 hp (0.22 Kw)
Mass (GVW)	956 pounds (433 kg)
Weight empty without batteries	395 pounds (179 kg)
Solution Control	Gravity feed, fully variable with automatic shut-off in neutral
Solution tank capacity	23 gal. (87 l)
Recovery tank capacity	25 gal. (95 l)
Scrub brush diameter for 36 in. (90 cm) scrub head	12 in (30.0 cm)
Scrub brush pressure	Actuated 0 lbs to 150 lbs (0 kg to 68 kg)
Scrub brush speed	165 rpm
Tires	2 x 10 in (25.4 cm) non-marking foam-filled
Casters	2 X 4 in (10.2 cm) polyurethane solid non-marking
Foundation Pressure (at recommended tire psi)	48 psi
Maximum Speed	3.2 Miles/hour (5.2 km/hour)
Frame Construction	Steel plate with epoxy powdercoat finish.
Brakes (optional)	Tire lock parking brake.
Minimum aisle u-turn width with 36 in. (90 cm) scrub head	73" (185 cm)
Maximum rated climb and descent angle with empty tanks and without optional parking brake	2%
Maximum rated climb and descent angle with full tanks and without optional parking brake	2%

ITEM	MEASURE
Height	45 in. (114 cm)
Length with 36 in. (90 cm) scrub head	72 in. (183 cm)
Width without squeegee and scrub head	24 in. (61 cm)
Width of squeegee for 36 in. (90 cm) scrub head	35 in. (89 cm)
Width of scrub path for 36 in. (90 cm) scrub head	36 in. (90 cm)
Battery Compartment Dimensions	23.5" L (60 cm) x 15" W (38 cm) x 14" H (36 cm)



SPECIAL NOTES:

The sound pressure level at the operator's ear was measured to be 68 dBA. This was a nearfield, broad-band measurement taken in a typical industrial environment on a tile floor. This appliance contains no possible source of impact noise. The instantaneous sound pressure level is below 63 Pa.

The weighted root mean square acceleration at the operator's arms was measured to be below 2.5m/s². This was a tri-axial, third-octave-band measurement made during normal operation on a composite tile floor. The measurement and related calculations were made in accordance with ANSI S3.34-1986.

How The Machine Works

The Saber Cutter is a battery powered, self-propelled, hard floor scrubber intended for commercial use. The appliance applies a cleaning solution onto a hard floor, scrubs the floor with brushes, and then vacuums the soiled water back into the recovery tank.

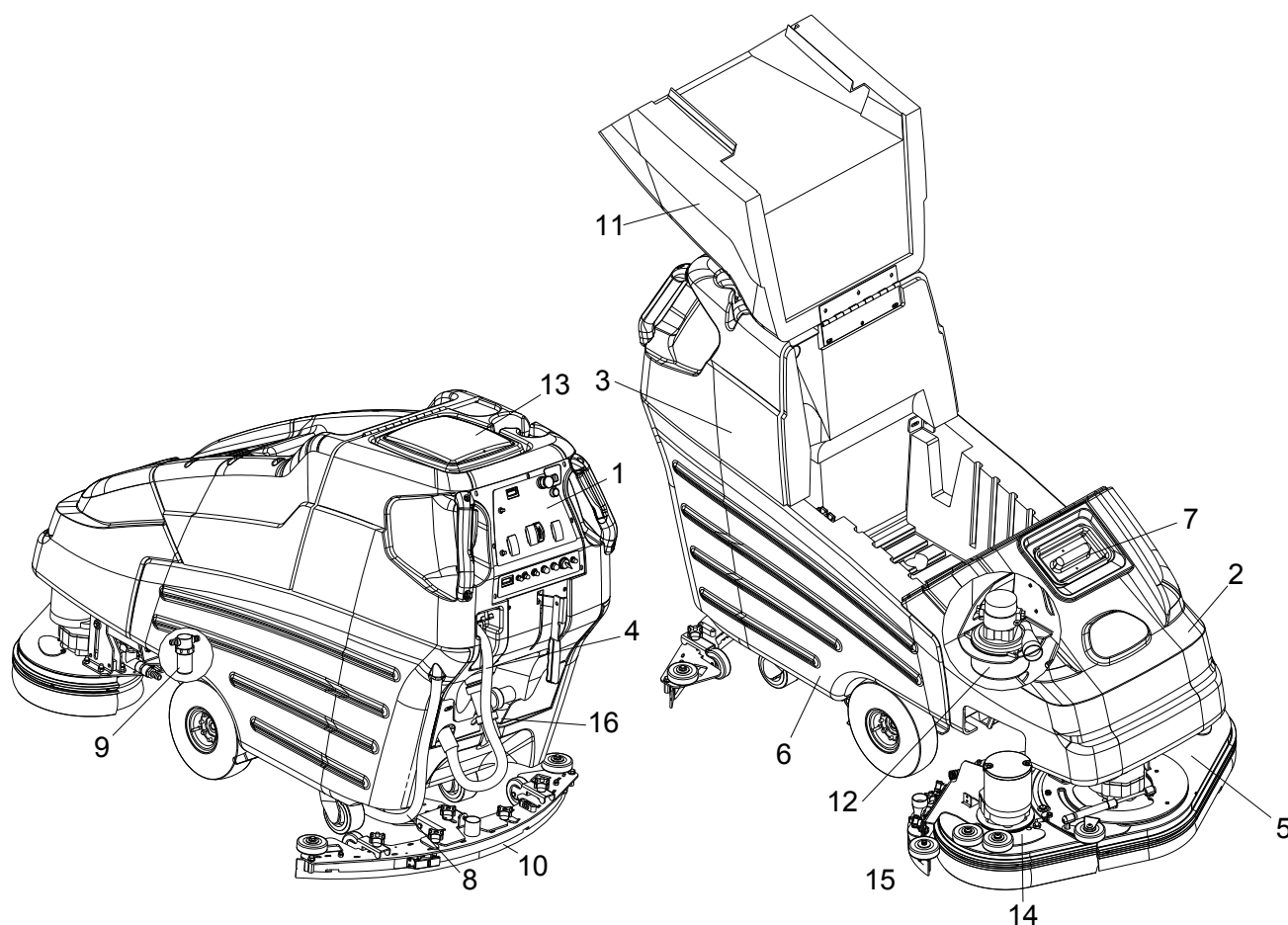
The machine's primary systems are the solution system, scrub system, recovery system, and directional control system.

The function of the solution system is to store cleaning solution and deliver it to the scrub system. The solution system consists of the solution tank, strainer, valve and controls. The solution tank stores cleaning solution (water and detergent) until it is delivered to the scrub system. The strainer protects the valve from debris. The valve is a solenoid type valve, which controls the delivery of cleaning solution to the scrub system. The valve automatically prevents solution flow unless the scrub brushes are turned on and the machine is being propelled. The solution control knob controls the amount of cleaning solution delivered to the scrub system by controlling the amount of time the valve is open.

The function of the scrub system is to scrub the floor. The scrub system consists of three rotary type disk scrub brushes, motors, scrub deck skirt, lift mechanism, swing mechanism and controls. The brushes scrub the floor and the motors drive the brushes. The brush drive hubs allow the scrub brushes to follow irregularities and changes in the floor without losing contact with floor. The scrub deck skirt controls the cleaning solution on the floor so that the squeegee can pick it up. The brush lift mechanisms are controls used to raise and lower the deck. The brush swing mechanisms are controls used to swing the deck in and out.

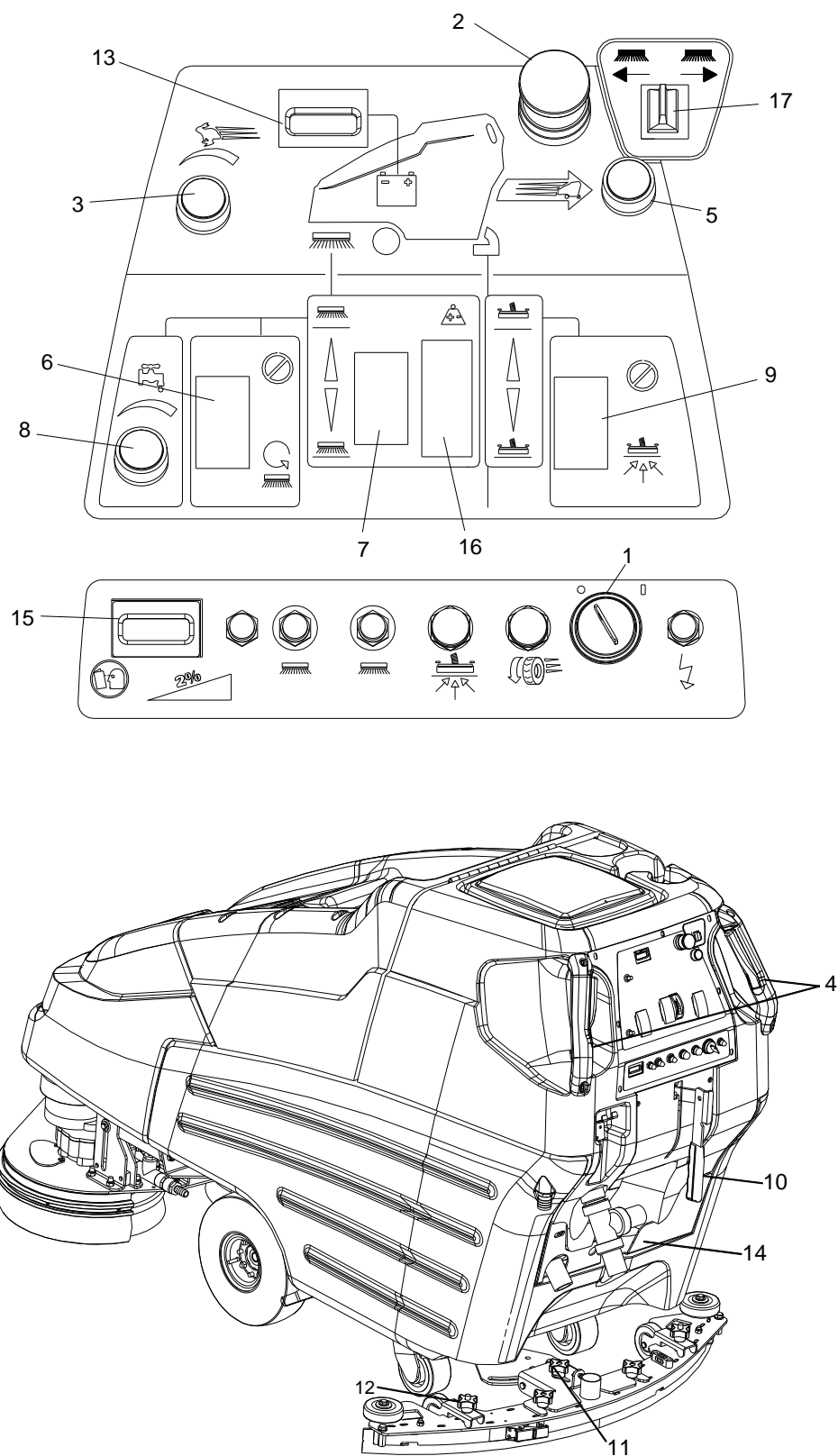
The function of the recovery system is to vacuum the soiled water back into the recovery tank. The recovery system consists of two squeegees, vacuum motor, float ball filter, recovery tank and controls. The squeegees wipe the dirty solution off the floor as the machine moves forward. The vacuum motor provides suction to draw the dirty solution off the floor and into the recovery tank. The recovery tank stores the dirty solution. The float ball filter protects the vacuum fan from debris and shuts off air going to the recovery tank when tank is full. When flow of air is shut off the vacuum motor will continue to run. At this time the recovery tank must be drained.

The function of the directional control system is to control the direction and speed of the machine. The directional control system consists of the propel control buttons, reverse button, speed control knob/potentiometer, controller and transaxle. The propel controls actuate switches which cause the machine to move forward. For reverse motion depress the reverse button while depressing one of the propel controls. The speed control knob actuates a potentiometer, which signals speed. The controller interprets the forward/reverse signals from the switches and the speed signal from the potentiometer to command the transaxle to propel the machine in the direction, and at the speed, desired.

Components

1. Control Panel
2. Front Cover
3. Recovery Tank
4. Recovery Tank Drain Hose
5. Scrub Head Fixed
6. Solution Tank
7. Solution Tank Cover
8. Solution Tank Drain Hose
9. Solution Strainer
10. Rear Squeegee
11. Top Cover
12. Vacuum Motor
13. Recovery Tank Dome
14. Scrub Head Swinging
15. Front Side Squeegee
16. Park Brake (Optional)

Controls



1. Key Switch
2. Emergency Shut Off Switch (Optional)
3. Speed Control Knob
4. Propel Control Lever
5. Reverse Button
6. Brush Switch
7. Actuator Switch Deck Up-Down
8. Solution Control Knob
9. Vacuum Switch
10. Squeegee Lift Lever
11. Squeegee Pitch Adjustment Knob
12. Squeegee Deflection Adjustment Knobs
13. Battery Charge Level Indicator
14. Parking Brake (Optional)
15. Hour Meter
16. Brush Pressure Indicator
17. Actuator Switch Deck In-Out

1. KEY SWITCH

Controls the power for machine functions.

To turn machine on, rotate key clockwise.

To turn machine off, rotate key counterclockwise.

FOR SAFETY: Always remove the key when machine is unattended or during service to prevent unauthorized movement.

2. EMERGENCY SHUT-OFF SWITCH (OPTIONAL)

Shuts off machine.

To shut off machine, push the switch.

To restart machine, rotate the switch clockwise.

3. SPEED CONTROL KNOB

Controls the speed of the machine.

To increase speed, rotate knob clockwise.

To decrease speed, rotate knob counterclockwise.

4. PROPEL CONTROL LEVERS

Controls the machine direction, and scrub brushes and solution flow.

To propel machine forward, squeeze either propel lever.

The scrub brushes will not rotate and the solution will not flow to scrub deck with the propel levers in neutral.

5. REVERSE BUTTON

Controls the reverse function.

To propel machine backward, push the reverse button then squeeze either propel lever.

To stop machine, release both propel levers then release the reverse button.

6. BRUSH SWITCH

Controls the scrub brush motors.

To turn scrub brushes on, press the bottom of the switch. The brushes will not rotate with the propel control levers in neutral.

To turn scrub brushes off, press the top of the switch.

7. ACTUATOR SWITCH DECK UP-DOWN

Adjusts the amount of brush pressure to the floor by raising or lowering the scrub deck. Use the brush pressure indicator to determine the correct pressure.

To increase brush pressure, press the bottom of the switch.

To decrease brush pressure or rise the scrub deck, press the top of the switch.

8. SOLUTION CONTROL KNOB

Controls solution flow to scrub deck.

To increase flow, rotate knob clockwise.

To decrease flow, rotate knob counterclockwise.

If the brush motors are turned off or the propel control levers are in neutral, the flow is automatically interrupted until the motors are turned on again. This feature prevents unintentional draining of the solution tank and allows the operator to adjust the solution flow to the scrub deck without resetting each time the scrubbing operation is interrupted.

9. VACUUM SWITCH

Controls the vacuum motor.

To start vacuum motor, press the bottom of the switch.

To stop vacuum motor, press the top of the switch.

10. SQUEEGEE LIFT LEVER

Raises and lowers the squeegee.

To lower the squeegee, lift the lever from its raised position.

To raise the squeegee, lift the lever from its lowered position.

11. SQUEEGEE PITCH ADJUSTMENT KNOB

Adjusts the deflection at the ends of the squeegee.

To increase squeegee blade deflection at the ends, turn knob counterclockwise.

To decrease squeegee blade deflection at the ends, turn knob clockwise.

12. SQUEEGEE DEFLECTION ADJUSTMENT KNOBS

Adjusts the deflection along the entire length of the squeegee.

To increase squeegee blade deflection along the entire length, turn the two knobs at the squeegee ends counter-clockwise.

To decrease squeegee blade deflection along the entire length, turn the two knobs at the squeegee ends clockwise.

13. BATTERY CHARGE LEVEL INDICATOR

Indicates the charge level of the batteries.

The meter display is divided into 10 vertical bars. Bar illuminated on the far right indicate full charge. Bars flashing near the left side indicate the batteries should be recharged. Further operation of the machine could damage the machine or the batteries.

When the machine is left overnight with less than a full charge, the display may initially indicate a full charge. It will also indicate a full charge if the batteries are disconnected, then reconnected. After a few minutes of operation the meter will give the correct charge level.

14. PARKING BRAKE (OPTIONAL)

Locks front wheels to prevent unintentional movement.

To set parking brake, push down to lock notch.

To release parking brake, push down and over out of the lock down notch.

15. HOUR METER

Records the number of hours the machine has been in operation. This information is useful in determining when to service the machine.

16. BRUSH PRESSURE INDICATOR

The brush pressure indicator corresponds to the amp draw of the scrub brush motors to tell how hard the motors are working. The green zone indicates medium or proper operating brush pressure. The red zone indicates heavy or excessive brush pressure. Operating in the red zone may cause the brush circuit breakers to trip.

17. ACTUATOR SWITCH DECK IN-OUT

Adjusts the width of the scrub path by swinging the far right brush in and out. To widen the scrub path push the switch to the right. To narrow the scrub path push the switch to the left.

Machine Operation

Pre-Run Machine Inspection

Do a pre-run inspection to find possible problems that could cause poor performance or lost time from breakdown. Follow the same procedure each time to avoid missing steps.

NOTE: See maintenance section for pre-run machine inspection checklist items.

Starting Machine

NOTE: Perform pre-run machine check before operating machine.

FOR SAFETY: Before starting machine, make sure that all safety devices are in place and operating properly.

1. Turn the machine power on.
2. Release the parking brake, if your machine is equipped with this option.
3. Engage the direction propel levers for the desired direction.

Emergency Stop Procedures

1. Release the propel levers.
2. Turn machine power off with key switch.
3. If an electrical problem is suspected push in emergency stop button, if machine is equipped with this option.
4. Apply brakes, if your machine is equipped with this option.

Filling Solution Tank

FOR SAFETY: Before leaving or servicing machine; stop on level surface, turn off machine and remove key.

1. Turn the machine power off.
2. Set the parking brake if your machine is equipped with this option.
3. Remove solution tank cover.
4. Fill the solution tank with clean water, leaving enough room for the required amount of cleaning solution. The solution tank capacity filled to 2" (5 cm) from bottom of fill inlet is 23 gallons (87 liters). The water must not be hotter than 140 F (60 C) to prevent damage to the tank.
5. Measure the chemical into the solution tank. Liquid chemicals should be added to the solution tank after filling with water. Dry chemicals should be thoroughly mixed before being added into solution tank. Commercially available, high alkaline floor cleaners, are suitable for use in the solution system.

NOTE: Read the chemical manufacturers recommended proportion instructions.

6. Replace solution tank cover.



Flammable materials can cause an explosion or fire. Do not use flammable materials in the tanks.

Double Scrub

For floors which are heavily soiled or have thick accumulations of floor finish may not clean sufficiently with one pass. In these cases it will be necessary to double scrub.

1. To double scrub, make the first pass over the surface being cleaned with both squeegees up, vacuum off, the solution on and brushes down. This allows the solution to stay in contact with the soil while loosening the surface accumulation with the brushes. Allow time for the first application to stay in contact with the floor. Length of time between the first and second pass depends on amount of accumulation and the type of chemical being used. A second scrubbing with both squeegees down and again the solution and brushes on will further loosen soil. The additional application of solution will further assist the difficult cleaning job.

FOR SAFETY: When using machine, go slow on inclines and slippery services.

Emptying And Cleaning Tanks

1. Park the machine next to a floor drain. Drain hose is on left rear corner of the machine.
2. Turn the machine power off and set parking brake, if your machine is equipped with this option.

Solution Tank

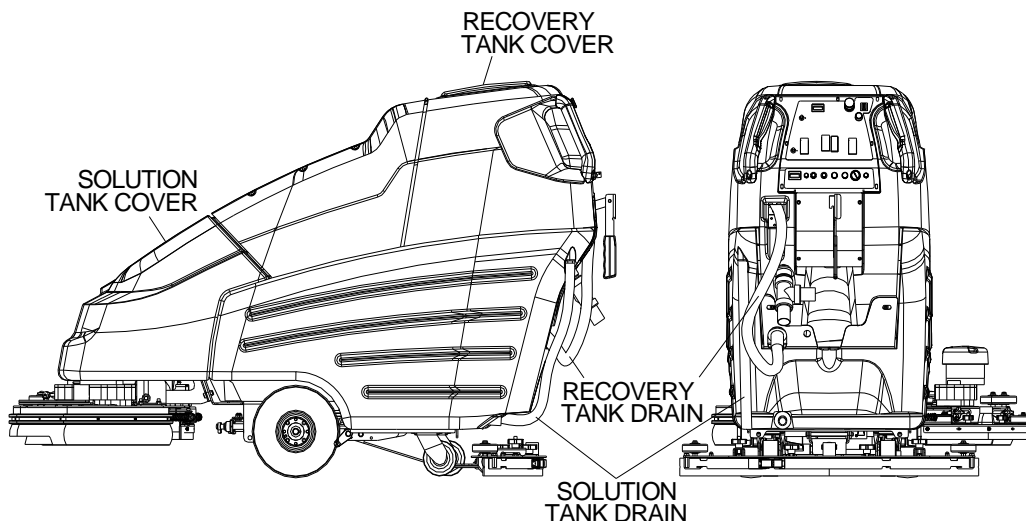
1. Loosen small drain hose from the retainer, then lower hose in direction of the drain.
2. Remove the solution tank cover.
3. Flush the solution tank out with clean water and run several gallons of clean water through systems. Do not use water hotter than 140°F (60°C) to clean tank. Damage may occur.

NOTE: Never allow solution to remain in tank. Damage to tank, seals and valves could occur.

4. Secure drain hose into the retainer.

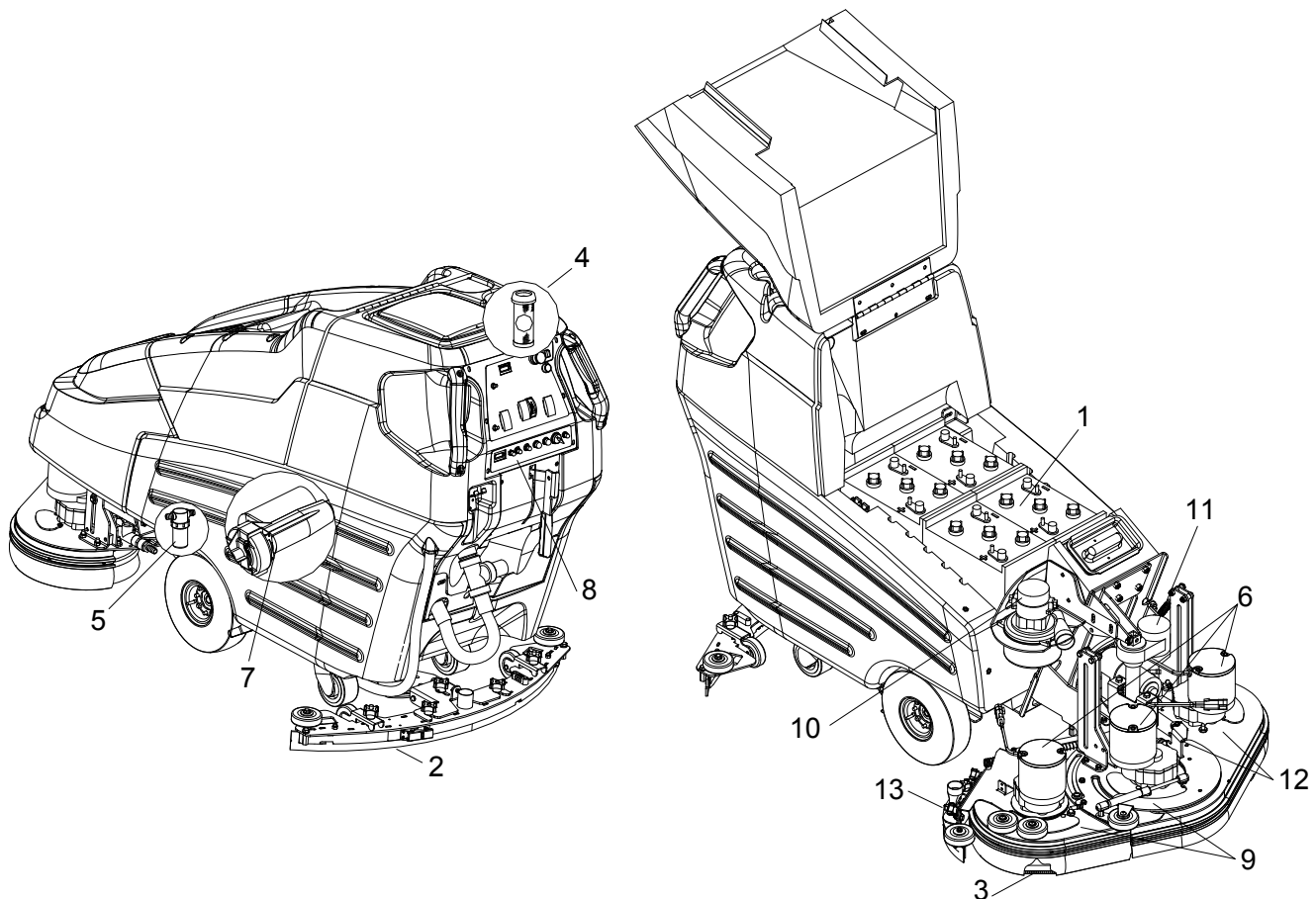
Recovery Tank

1. Unhook the large drain hose from the retainer. Lower hose in direction of the drain then unscrew the T-handle on plug enough to loosen plug. Do not stand in front of end of hose. Recovered solution will come out with force. Slowly remove plug from drain hose.
2. Remove the recovery tank dome. Flush the recovery tank out with clean water. Do not use water hotter than 140°F (60°C) to clean tank. Damage may occur.
3. Clean off the float shut-off system and inspect for free movement of float. The float shut-off system is located in the rear of the recovery tank.
4. Replace the drain plug and secure drain hose in bracket.
5. If machine is to be stored, leave the recovery tank dome off.



Service Schedule

MAINTENANCE	DAILY	WEEKLY	MONTHLY	100HRS	200HRS
Check batteries after charging; add water if necessary	*				
Check pad wear to prevent buildup of chemicals	*				
Check linkages and connectors for wear and damage	*				
Check hoses for wear, blockages, or damage	*				
Clean squeegee; check for adjustment; inspect for wear	*				
Check handles, switches, knobs, domes, and gaskets for damage	*				
Clean out recovery tank	*				
Clean out solution tank; remove and clean screen	*				
Clean outside of all tanks; check for damage	*				
Run vac motor for at least one minute to allow motor to dry	*				
Store with dome off tank to allow the tank to dry	*				
Check scrub deck skirt		*			
Check batteries for corrosion, cracks and evidence of overheating			*		
Check all bearings for noise			*		
Check all gaskets for wear and leakage			*		
Check vac motor carbon brushes			*		
Check brushes for wear; ensure bristles are not damaged			*		
Check linkages for wear and damage			*		
Grease transaxle			*		
Grease wheels and casters			*		
Check squeegee blades for wear and frame for damage			*		
Check overall performance of machine			*		
Clean batteries and terminals				*	
Check parking brake (inspect cables, linkages and pulleys)					*
Check carbon brushes in all vacuum, brush drive, and propel motors					*
Blow out dust in motors					*
Inspect motor commutators					*
Clean chains, cables and pulleys					*
Clean pivot points on squeegee and scrub deck linkages					*



1. Batteries
2. Rear Squeegee
3. Scrub Brushes
4. Float Shut-Off
5. Solution Strainer
6. Brush Motor
7. Traction Motor
8. Circuit Breakers
9. Scrubhead Fixed and Swinging
10. Vacuum Motor
11. Actuator Scrub Deck Up-Down
12. Actuator Scrub Deck In-Out
13. Front Side Squeegee

Batteries

The batteries provide the power to operate the machine. The batteries require regular maintenance to keep them operating at peak efficiency.

The machine batteries will hold their charge for long periods of time, but they can only be charged a certain number of times. To get the greatest life from the batteries, charge them when their charge level reaches 25% of a full charge. Use a hydrometer to check the charge level.

Do not allow the batteries to remain in a discharged condition for any length of time. Never expose a discharged battery to temperatures below freezing. Discharged batteries will freeze causing cracked cases. Do not operate the machine if the batteries are in poor condition or if they have a charge level below 25% (specific gravity below 1.155).

Keep all metallic objects off the top of the batteries, as they may cause a short circuit. Replace worn or damaged cables and terminals.

Check the electrolyte level in each battery cell before and after charging the batteries. Never add acid to the batteries, use distilled water. Do not allow water level to fall below the battery plates. Portions of plates exposed to air will be destroyed. Do not overfill. Keep plugs firmly in place at all times

CAUTION:

When servicing machine, avoid contact with battery acid.

WARNING:

Batteries emit hydrogen gas. Explosion or fire can result. Keep sparks and open flame away. Keep covers open when charging.

WARNING:

Wear eye protection and protective clothing when working with batteries.

WARNING:

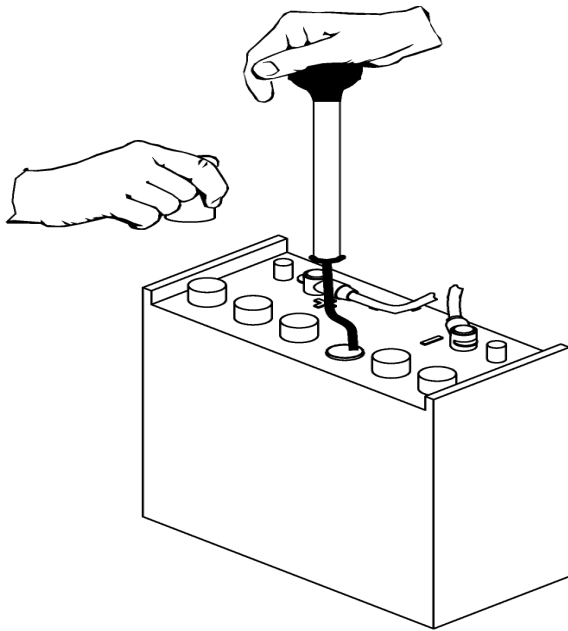
Charge batteries in a well ventilated area.

BATTERY MAINTENANCE

1. When cleaning the batteries, use a solution of baking soda and water. Do not allow the cleaning fluid to enter the battery cells, electrolyte will be neutralized.
2. Maintain the proper electrolyte level in each battery cell. If a cell should accidentally overflow, clean immediately.
3. Wipe off the top of the batteries at least once a week.
4. Test battery condition with a hydrometer at least once a week.
5. Ensure that all connections are tight and all corrosion removed.
6. Every 4 to 6 months, remove the batteries from the machine and clean the battery cases and battery compartment.

Checking Battery Specific Gravity

Use a hydrometer to check the battery specific gravity.



Checking Gravity

- a. Hydrometer
- b. Battery

NOTE: Do not take readings immediately after adding distilled water, if the water and acid are not thoroughly mixed, the reading may not be accurate.

Check the hydrometer readings against this chart.

SPECIFIC GRAVITY @ 80°F (27°C)	BATTERY CONDITION
1.265	100% CHARGED
1.225	75% CHARGED
1.190	50% CHARGED
1.155	25% CHARGED
1.120	DISCHARGED

NOTE: If the readings are taken when the battery electrolyte is any temperature other than 80°F (27°C), the reading must be temperature corrected.

To find the corrected specific gravity reading when the temperature of the battery electrolyte is other than 80°F (27°): Add (+) to the specific gravity reading 0.004 (4 points), for each 10°F (6°C) above 80° (27°C).

Subtract (-) from the specific reading 0.004 (4 points), for each 10°F (6°C) below 80°F (27°C).

To Charge the Batteries

⚠ WARNING:

When servicing machine, avoid contact with battery acid.

⚠ CAUTION:

Batteries emit hydrogen gas. Explosion or fire can result. Keep sparks and open flame away. Keep covers open when charging.

⚠ WARNING:

Wear eye protection and protective clothing when working with batteries.

⚠ WARNING:

Charge batteries in a well ventilated area. Leave the battery cover open.

Use a 24 volt, 18 amp maximum output or 25 amp (depending on the size of the batteries), DC charger which will automatically shut off when the batteries are fully charged.

1. Stop the machine in a clean, well ventilated area next to the charger.
2. Turn "OFF" machine.

FOR SAFETY: Before leaving or servicing machine; stop on level surface, turn off machine and remove key.

3. Raise the battery cover.

⚠ WARNING:

Batteries emit hydrogen gas. Explosion or fire can result. Keep sparks and open flame away. Keep covers open when charging.

4. Check the electrolyte level in each battery cell. Before charging, add just enough distilled water to cover the plates. After charging is complete, add just enough distilled water to bring up the level to the indicator ring. If the water level is too high before charging, normal expansion rate of the electrolyte may cause an overflow. Resulting in a loss of battery acid balance and damage the machine.

5. Replace the battery caps, and leave them in place while charging.
6. Unplug the battery connector from the machine.

FOR SAFETY: When charging, connect the charger to the batteries before connecting the charger to the AC wall outlet. Never connect the charger to the AC wall outlet first. Hazardous sparks may result.

7. Plug the charger connector into the battery connector. Connect the charger AC plug to a wall outlet. The charger gauge should indicate that the batteries are charging.
8. When the batteries are fully charged, disconnect the charger from the AC wall outlet, then disconnect the charger from the batteries.
9. Connect the batteries to the machine connector.
10. Check the electrolyte level. It should be up to the indicator ring. If necessary, add distilled water.
11. Lower the battery cover.

Machines equipped with Onboard Charger:

1. Connect charger's AC power cord to AC mains. The charger's YELLOW "AC" LED will light.

NOTE: When charger is energized, all machine function will shut down.

2. Current level being delivered to the batteries will be displayed on the charger's bar graph.
3. When battery charge level has reached 80% the YELLOW "80%" LED will light.
4. Batteries will then receive a low current "finish-charge" indicated by the flashing GREEN "100%" LED.
5. Charging cycle is complete when "100%" LED is continuously GREEN.
6. Disconnect charger's AC power cord.
7. Raise battery cover and check the battery electrolyte level. It should be up to the indicator ring. If necessary, add distilled water.
8. Lower the battery cover.

NOTE: For additional information about battery charger function, please see the charger Product Manual.

Changing Batteries

Stop the machine in a clean area next to the charger. Turn off machine.

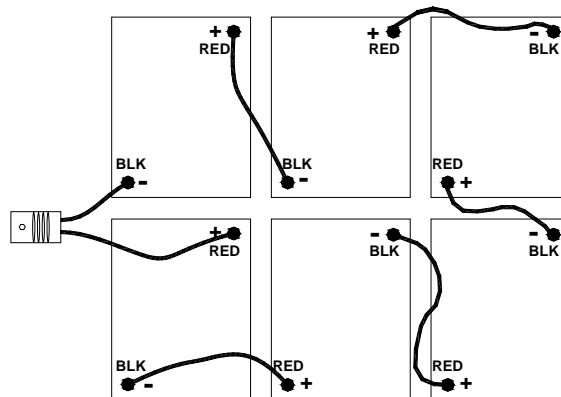
FOR SAFETY: Before leaving or servicing the machine; stop on level surface, turn off machine and remove key.

1. Raise the battery cover.
2. Disconnect battery pack from machine.
3. Use the proper size open end wrench to disconnect main ground wire first and secure cable terminal away from batteries.
4. Disconnect main positive lead and secure cable terminals away from batteries.
5. Loosen both terminals on each jumper cable and remove one at a time.
6. Prepare a suitable site to place the batteries.
7. Attach suitable battery lifting device and lift batteries from the machine.



Batteries are a potential environmental hazard. Consult your battery supplier for safe disposal methods.

Battery Connections



FRONT OF MACHINE

Rear Squeegee

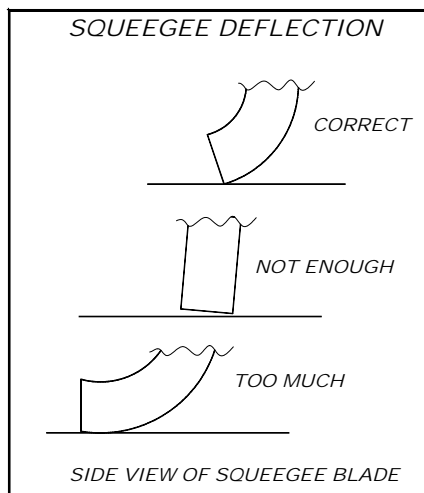
The front squeegee blade allows solution to pass through channels in the blade into the squeegee assembly while maintaining vacuum to provide lift. The front blade has four wear surfaces and can be rotated for extended life. The front blade should not require regular replacement under normal use.

The rear blade wipes the floor to a near dry condition. It is important the rear blade be in good condition to properly do its job. As with the front, each squeegee blade assembly has four wear surfaces for extended service.

Check both the front and rear squeegee blades for damage, wear, and adjustment each day in the pre-run check. Change the front blade if it is torn or has an uneven edge. Change the rear blade if it is less than 1/2 the original thickness.

Adjusting Squeegee

Adjusting the squeegee is a two-part process. First, the squeegee assembly must have correct pitch in order for the squeegee blade to have the same deflection at each tip as well as the center. The knob on the squeegee linkage controls the pitch adjustment. The second adjustment is the deflection. Knobs on each end of the squeegee control this.



To Remove Squeegee Assembly

1. With the squeegee in the up position, turn key switch "OFF".
2. Disconnect vacuum hose from squeegee and loosen both knobs.
3. Pull squeegee assembly rearward from the lifting carrier.
4. Inspect or repair as necessary and reinstall.

To Replace or Rotate Rear Squeegee Blades

1. With the squeegee in the up position, turn key switch "OFF".

FOR SAFETY: Before leaving or servicing machine; stop on level surface, turn off machine and remove key.

2. Remove the squeegee assembly from the machine. Unlatch and remove blade retainer strap and remove squeegee blade.
3. Rotate the squeegee to new edge position or replace as required. Each blade has four new edge positions.
4. Install blade on locating pins of squeegee assembly.
5. Install squeegee retainer strap.
6. Fasten and lock latch, adjust latch only tight enough to take up slack in retaining strap.

To Adjust Squeegee Pitch

1. Choose a smooth, level surface. Turn "ON" the key switch. Lower the squeegee and drive forward at least 2 feet (60cm.).
2. With the squeegee down, stop the machine. Do not allow machine to roll back.

FOR SAFETY: Before leaving or servicing the machine; stop on level surface, turn off machine and remove key.

3. Determine the differences, if any, in deflection of the squeegee blade between each end and the middle. Proper adjustment is obtained when deflection is equal all the way across the squeegee blade. The bubble level should also indicate when the squeegee is adjusted properly. When the air bubble is in the center of the vial, the deflection should be even across the squeegee blade.
4. To decrease the deflection of the squeegee blade at the ends, tighten knob near the squeegee center. To increase the deflection at the ends of the squeegee assembly, loosen knob.
5. Check the deflection of the squeegee blades again. Repeat steps 1 through 4 until the deflection is equal across the entire rear squeegee blade.

To Adjust Amount of Rear Squeegee Deflection

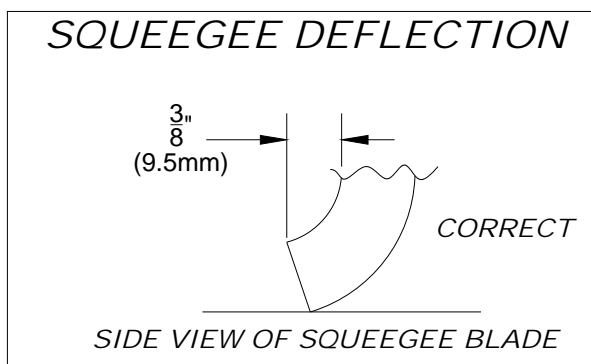
1. Choose a smooth, level surface. Lower the squeegee and drive forward at least 2 feet (60cm).
2. With the squeegee down, stop the machine. Do not allow machine to roll back.

FOR SAFETY: Before leaving or servicing machine; stop on level surface, turn off machine and remove key.

3. Observe the amount of squeegee deflection. It should deflect $\frac{3}{8}$ in. (9.5mm) across the entire width of the squeegee.
4. To increase the squeegee deflection, turn the 2 knobs at the squeegee ends counter-clockwise. To decrease the deflection, turn the knobs clockwise.

NOTE: The deflection should be consistent along the length of the squeegee. If the deflection varies from end to end the knobs can be adjusted independently to correct the variation.

5. Turn on the key switch. Raise, then lower squeegee assembly. Drive forward at least 2 feet (60cm).
6. Repeat steps 2 through 4 until deflection of $\frac{3}{8}$ in. (9.5mm) is reached.



Scrub Brushes

There are four different types of brushes available to cover applications from cleaning heavily soiled floors to polishing. A pad driver is also available to take advantage of the many cleaning pads on the market. Please refer to the following to assist in selecting the proper brush or pad for the work at hand.

Uncoated Floors

Aggressive Grit is a nylon fiber impregnated with silicone carbide grit. It grinds away stain, soil, and removes surface material.

Mild Grit is a less aggressive silicone carbide grit suitable for cleaning medium soil conditions. Advantages are faster ground speed than nylon bristles on light solid applications.

Polypropylene is a general-purpose scrub brush with stiff bristles. Polypropylene works well for maintaining concrete, wood and tile floors.

Finished Floors

Nylon bristles are used in a variety of applications on coated or uncoated surfaces.

White Pads (Polishing) are used for dry polishing to achieve a high-gloss appearance, or surface washing on highly polished or burnished floors.

Red Pads (Buffing) are used for light-duty scrubbing. When used with a mild detergent they will provide surface cleaning without removing the finish.

Blue Pads (Scrubbing) are used for heavy-duty scrubbing and light stripping. The blue pads remove less finish than brown stripping pads, yet will remove black marks, stains and dirt.

Black Pads (Stripping) are used for easy and complete removal of old floor waxes/finishes. They will quickly remove ground in dirt, black heel marks, and spills. When used with the proper stripper, this pad leaves the floor clean and ready for finishing.

The scrub brushes should be checked before each days work for wire, string, wear and damage.

Replacing or Installing Scrub Brushes

1. With the scrub deck up, turn "OFF" the machine.

FOR SAFETY: Before leaving or servicing the machine; stop on level surface, turn OFF machine and remove key.

2. Remove the brush cover shrouds.
3. Locate release lever on top of brush or pad driver. Rotate release lever counter-clockwise and the brush/pad driver will release and drop down.
4. To reinstall, center the brush driver under the brush drive hub. Raise until it contacts brush driver assembly. Turn clockwise until release lever plate locks into position.
5. Replace the brush cover shrouds.

NOTE: Check that release plate is completely closed and pad/brush is securely attached. Damage to driver or brush could occur.

Recovery Tank Float Shut-Off

When water is no longer being vacuumed from the floor and the vacuum fan is operating, the ball float has engaged. The vacuum motor will not vacuum water with recovery tank full. The recovery tank must be drained.

1. The float shut-off screen can be cleaned in or out of the machine.
2. To clean the float shut-off while it is inside the machine wipe material off screen then rinse. Check that the ball is also clean and moves freely.
3. To remove the float shut-off, grasp the screen with one hand and the connected tube with the other. Tilt and pull the float screen assembly to pull it off the barb on the tube.
4. To install, place one hand on the tube, and then tilt and push the float screen assembly over the barb on the tube.

Solution Strainer

The solution strainer is located in front of the left front wheel. The solution strainer protects the solenoid valve from debris. If there is little or no solution flow to the ground, check the strainer for debris. Drain the solution tank and clean the solution strainer. To remove the strainer, turn the bottom part of the strainer counter-clockwise until the bottom is separated. Clean out the debris from the wire mesh and re-assemble. Make sure the O-ring gasket is in place when re-assembled

Brush Motor

WARNING:

Do not use a pressure washer to clean around the brush motors. Use tap pressure only.

Changing Brush Motors

1. With the scrub deck in the stored position, disconnect brush motor wiring connector from harness.
2. Remove shrouds from scrub deck to access and remove scrub brushes or pad drivers.
3. Remove retaining bolt, lock washer, flat washer and star drive from brush motor shaft.
4. Remove 4 brush motor mounting bolts located under scrub deck.
5. Remove brush motor.
6. Reverse steps to install.

Brush Motor Carbon Brush Replacement

1. Remove the cover from the top of the motor by removing the three screws.
2. Note the alignment mark on motor barrel to motor cap. Remove three bolts.
3. Remove end cap with brushes from motor.

NOTE: Motors contain two wave washers in cap. Do not lose these.

4. Install the new end cap with brushes and realign with scribe marks on motor barrel. Reinstall the three attach bolts from cap into base.
5. Maintain alignment between motor barrel base and cap.
6. Install the cover on top of the motor with the three screws.

Traction Motor



Do not use a pressure washer to clean around the motors. Use tap pressure only.

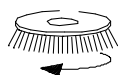
Traction Motor Carbon Brush Replacement

FOR SAFETY: Before leaving or servicing machine, stop on a level surface, turn off machine and remove key.

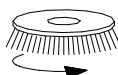
1. Disconnect batteries from machine.
2. Disconnect the electrical connection to the traction motor.
3. Remove brush cap.
4. Release brush from spring tension. Remove screw connecting brush wire lead to brush holder. Clean brush holder to insure free movement.
5. Install new brush and reinstall connecting screw and lead.
6. When all new brushes are installed. Place all in retracted position, held into brush holder by spring tension.
7. Carefully replace brush cap onto bearing on motor shaft.

Circuit Breakers

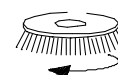
Circuit breakers interrupt the flow of power in the event of an electrical overload. When a circuit breaker is tripped, reset it by pressing the exposed button. If a circuit breaker continues to trip, the cause of the elec-



20 Amp. Protects the left scrub brush motor.



20 Amp. Protects the center scrub brush motor.



20 Amp. Protects the swinging scrub brush motor.



30 Amp. Protects the vacuum motor.



30 Amp. Protects the propel motor.



3 Amp. Protects the machine controls.

trical overload should be found and corrected.

Brush Shroud & Brush Skirts

Contain the water in the shroud area. The skirt will flex over uneven floors and also as the brush or pad wears. As the brush wears the shrouds can be adjusted so that skirt does not have to flex so much.

Remove three bolts on each side that fasten the bracket to the cover and re-assemble in the top holes. When the brushes are replaced with new ones move the covers back to the lower set of holes.

Vacuum Motor

(Refer to the Vacuum Group in the parts section of manual)

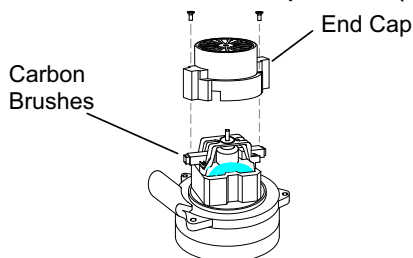
! WARNING:

Do not use a pressure washer to clean around the vacuum motors. Use tap pressure only. Care must be taken so that water is not directed into vacuum motor air intakes.

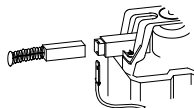
Changing Vacuum Motor

1. Remove side cover.
2. Disconnect electrical connector to the vacuum motor.
3. Loosen clamp and disconnect hose from vacuum intake.
4. Remove vacuum motor mounting bracket bolts, which are located under frame.
5. Remove vacuum motor and mounting bracket assembly
6. Reverse steps to install.

Vacuum Motor Carbon Brushes Replacement (Windsor)

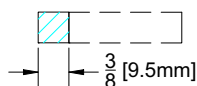


If armature commutator is grooved, extremely pitted or not concentric, the motor will need to be replaced or sent to a qualified service center.



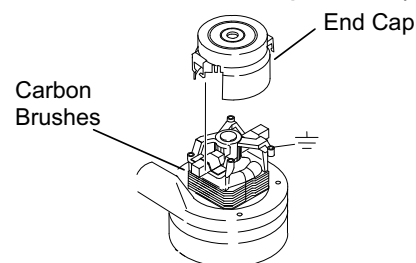
Important:

These brushes wear quicker as the length shortens due to increased heat. Spring inside brush housing will damage motor if brushes are allowed to wear away completely.

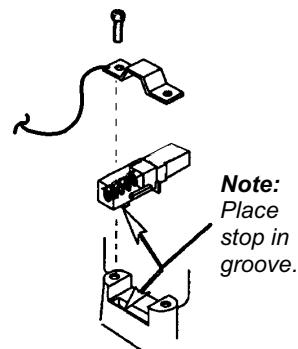


Periodically check the length of the carbon brushes. Replace both carbon brushes when either is less than 3/8" (9.5mm) long.

Vacuum Motor Carbon Brushes Replacement (Ametek)

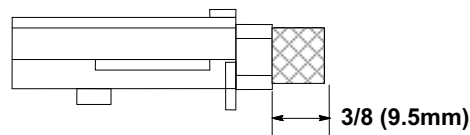


If armature commutator is grooved, extremely pitted or not concentric, the motor will need to be replaced or sent to a qualified service center.



Important:

These brushes wear quicker as the length shortens due to increased heat. Spring inside brush housing will damage motor if brushes are allowed to wear away completely.



Periodically check the length of the carbon brushes. Replace both carbon brushes when either is less than 3/8" (9.5mm) long.

Actuator Scrub Deck Up-Down Removal/Replacement

FOR SAFETY: Before leaving or servicing machine, stop on a level surface, turn off machine and set parking brake (If option is installed).

1. Remove front cover.
2. Remove clevis pin and rue ring from lower bracket of actuator; do not allow actuator barrel to rotate.
3. Disconnect actuator from wiring harness.
4. Remove upper clevis pin and rue ring from actuator bracket.
5. Reverse steps to install.

Scrub Deck Up-Down Actuator Adjustment

The actuator will need to be adjusted when replaced.

To adjust the actuator:

1. While holding actuator barrel to prevent it from spinning, apply power to the actuator such that it is fully extended. Positive power to white wire, and negative/ground to black. Limit switch within actuator will stop it.
2. Turn barrel out one or more full turns to assure that when it is retracted it will not bind against itself.
3. While holding actuator barrel to prevent it from spinning, apply power to the actuator such that it is fully retracted. Positive power to black wire, and negative/ground to white wire. Limit switch within actuator will stop it.
4. With actuator fully retracted, turn barrel in until it touches the base of the threaded shaft.
5. At the bottomed out position, turn the barrel out 1 1/2 turns, then enough more to allow connection to lift linkage.
6. Connect actuator to lift linkage.
7. Check travel of actuator during operation.

Actuator Scrub Deck In-Out Removal/Replacement

FOR SAFETY: Before leaving or servicing machine, stop on a level surface, turn off machine and set parking brake (If option is installed).

1. Remove front cover.
2. Swing the deck to the fully open position. This will align the access holes in the deck plates so that the clevis pin can be removed.
3. Remove the clevis pin and rue ring from both ends of the actuator.
4. Disconnect actuator from wiring harness.
5. Reverse steps to install.

Scrub Deck In-Out Actuator Adjustment

The actuator will need to be adjusted when replaced.

To adjust the actuator:

1. While holding actuator barrel to prevent it from spinning, apply power to the actuator such that it is fully extended. Positive power to white wire, and negative/ground to black. Limit switch within actuator will stop it.
2. Turn barrel out one or more full turns to assure that when it is retracted it will not bind against itself.
3. While holding actuator barrel to prevent it from spinning, apply power to the actuator such that it is fully retracted. Positive power to black wire, and negative/ground to white wire. Limit switch within actuator will stop it.
4. With actuator fully retracted, turn barrel in until it touches the base of the threaded shaft.
5. At the bottomed out position, turn the barrel out **1/2 of a turn**, then enough more to allow connection to linkage.
6. Connect actuator to linkage.
7. Check travel of actuator during operation.

Front Side Squeegee

The front blade allows solution to pass through channels in the blade into the squeegee assembly while maintaining vacuum to provide lift. The front blade has two wear surfaces and can be rotated for extended life. The front blade should not require regular replacement under normal use.

The rear blade wipes the floor to a near dry condition. It is important the rear blade be in good condition to properly do its job. As with the front, each squeegee blade assembly has two wear surfaces for extended service.

Check both the front and rear squeegee blades for damage, wear, and adjustment each day in the pre-run check. Change the front blade if it is torn or has an uneven edge. Change the rear blade if it is less than 1/2 the original thickness.

Adjusting Squeegee

The squeegee assembly must have correct deflection at each tip as well as the center. The knobs on the squeegee linkage control the adjustment.

To Remove Squeegee Assembly

1. With the squeegee and deck in the up position, and the swinging deck in the out position, turn key switch "OFF".
2. Disconnect vacuum hose from squeegee and loosen both mounting knobs.
3. Pull squeegee assembly rearward from the lifting carrier.
4. Inspect or repair as necessary and reinstall.

FOR SAFETY: Before leaving or servicing machine; stop on level surface, turn off machine and remove key.

To Replace Or Rotate Front Side Squeegee Blade

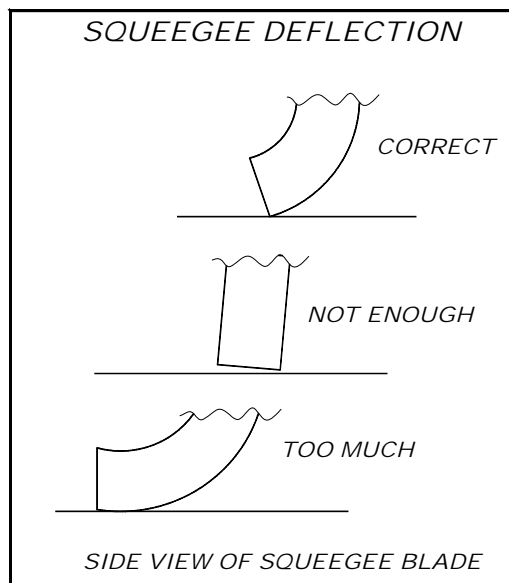
1. With the squeegee and deck in the up position, and the swinging deck in the out position, turn key switch "OFF".
2. Remove the squeegee from the machine. Remove retaining nuts then remove the retainer strap and squeegee blade.
3. Rotate the squeegee to new edge position or replace as required. Each blade has two edge positions. When installing the front blade, tighten the center nut first. Insure that the retainer strap is pressed against the blade before tightening the outer nuts.

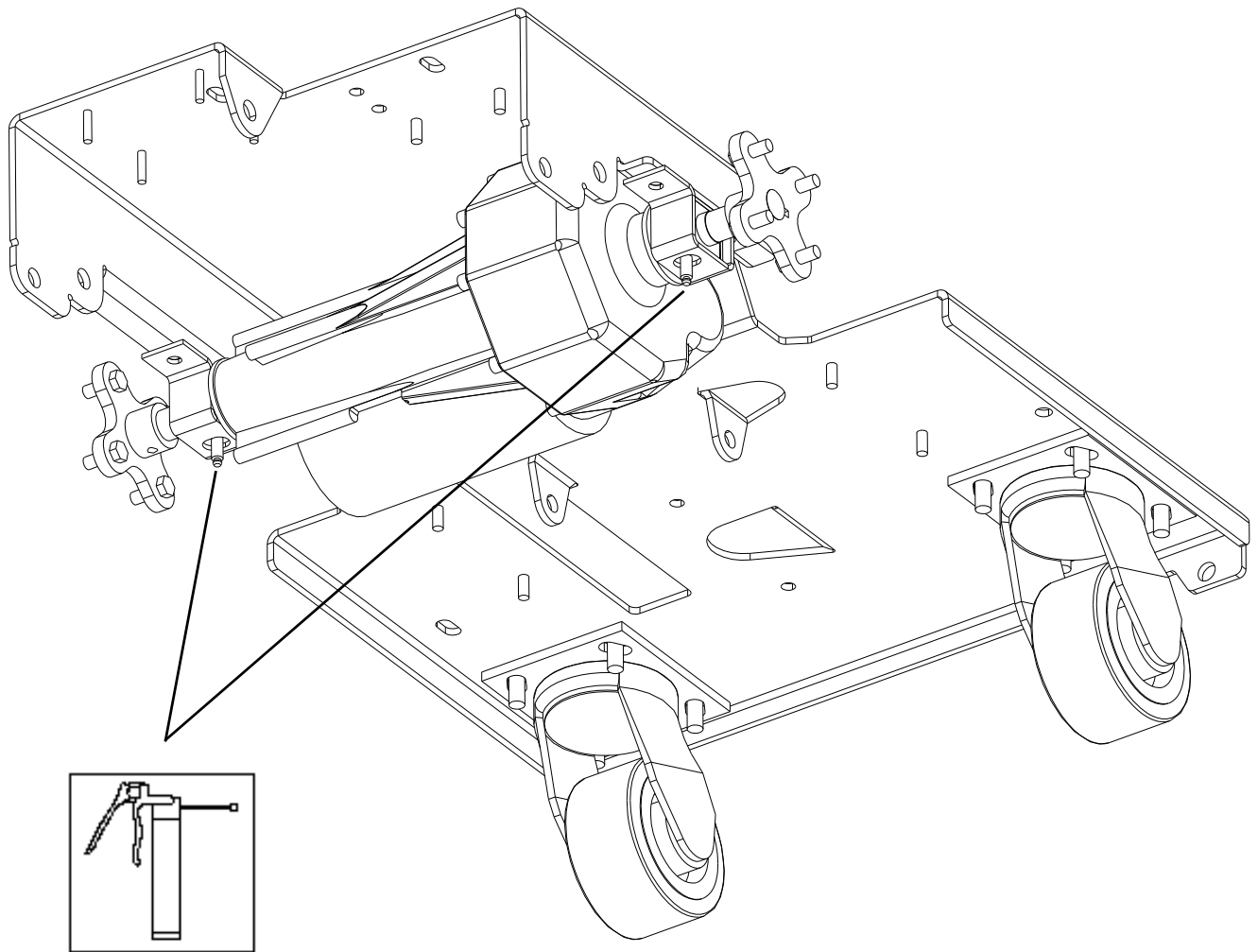
To Adjust Front Side Squeegee Deflection

1. Choose a smooth, level surface. Lower the front squeegee and deck and drive forward at least 2 feet (60cm) until the desired brush pressure is obtained.
2. With the squeegee down, stop the machine. Do not allow machine to roll back.

FOR SAFETY: Before leaving or servicing machine; stop on level surface, turn off machine and remove key.

3. Observe the amount of squeegee deflection. It should deflect 1/4 in. (6.25mm) across the entire width of the squeegee.
4. To increase the squeegee deflection, loosen the two knobs on the linkage and lower the squeegee and bracket, then retighten. To decrease the deflection, loosen the two knobs on the linkage and raise the squeegee and bracket, then retighten.
5. Turn on the key switch. Raise, then lower squeegee and deck assembly. Drive forward at least 2 feet (60cm) until the desired brush pressure is obtained.
6. Repeat steps 2 through 4 until deflection of 1/4 in. (6.25mm) is reached.





Axle - Recommended Greasing

1-2 strokes of Mobiltemp®78 or compatible clay-based or calcium-based grease.

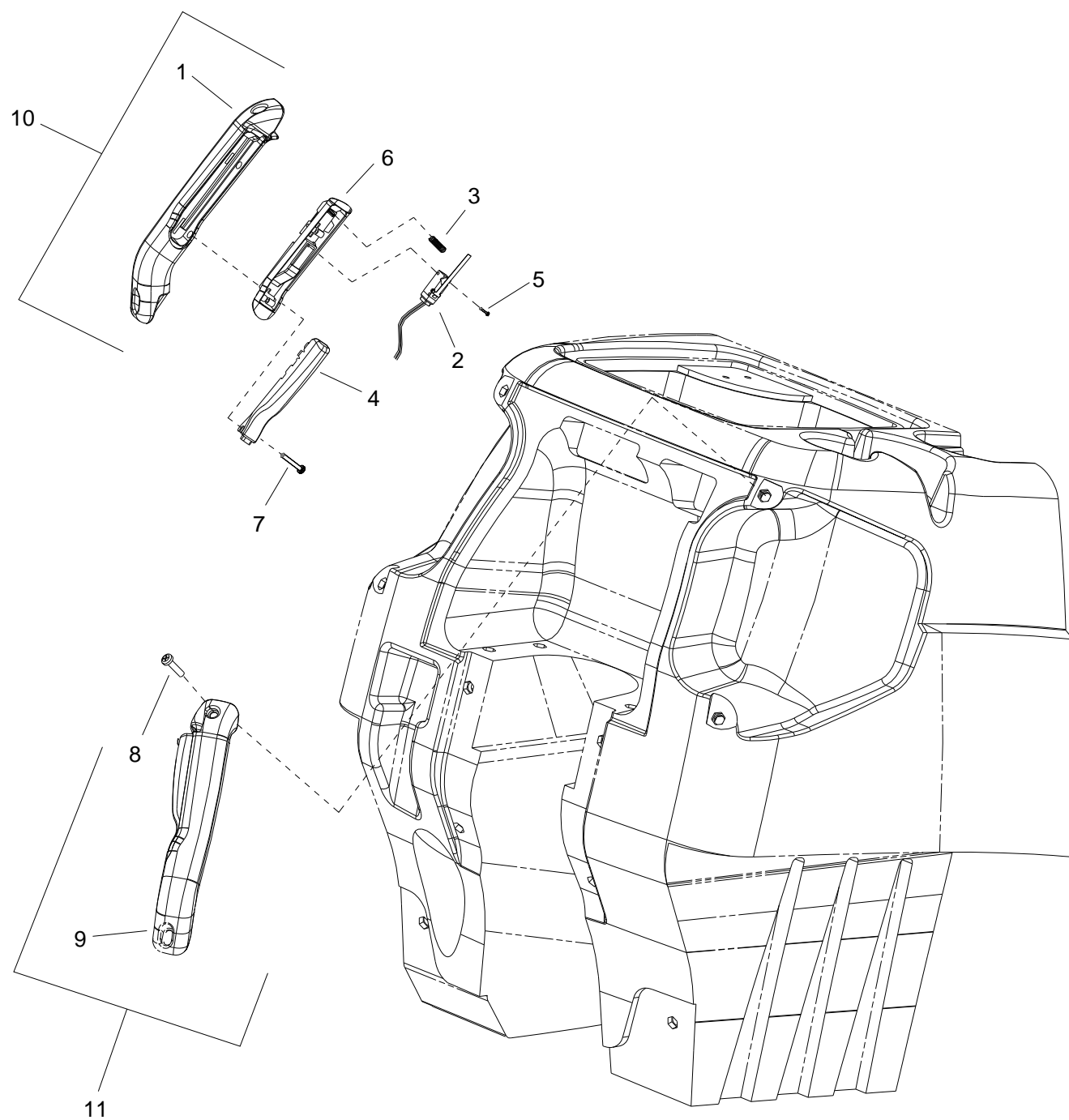
Machine Troubleshooting

PROBLEM	CAUSE	SOLUTION
Poor or no water pick-up on either squeegee	Squeegee out of adjustment	Adjust squeegee
	Debris caught on squeegee	Remove debris
	Worn squeegee blades	Rotate or replace squeegee blades
	Vacuum hose clogged	Clear obstruction from hose
	Vacuum hose disconnected from squeegee or recovery tank	Reconnect vacuum hose
	Vacuum hose damaged	Replace vacuum hose
	Recovery tank not sealed	Place recovery tank dome on tank. Replace damaged gaskets.
	Foam filling recovery tank	Empty recovery tank Use less or different detergent Use defoamer
Vacuum motor does not run, or runs slowly	Recovery tank full	Drain recovery tank
	Recovery tank float system dirty	Clean float system
	Circuit breaker tripped	Reset circuit breaker
	Loose connection	Check motor wires and connections
	Faulty vacuum switch	Replace switch
	Worn vacuum motor brushes	Replace brushes, check commutator
Poor scrubbing performance	Debris caught in scrub brushes	Remove debris
	Worn brushes or pads	Replace brushes or pads
	Improper detergent, brush or pad used	Contact equipment or application specialist
	Low scrub brush down pressure	Increase brush pressure
	Low battery charge	Charge batteries
Brush motors do not run, or runs slowly	Circuit breaker(s) tripped	Reset circuit breaker(s)
	Loose connection	Check motor wires and connection
	Faulty brush motor contactor	Replace contactor
	Worn brush motor brushes	Replace brushes, check commutator

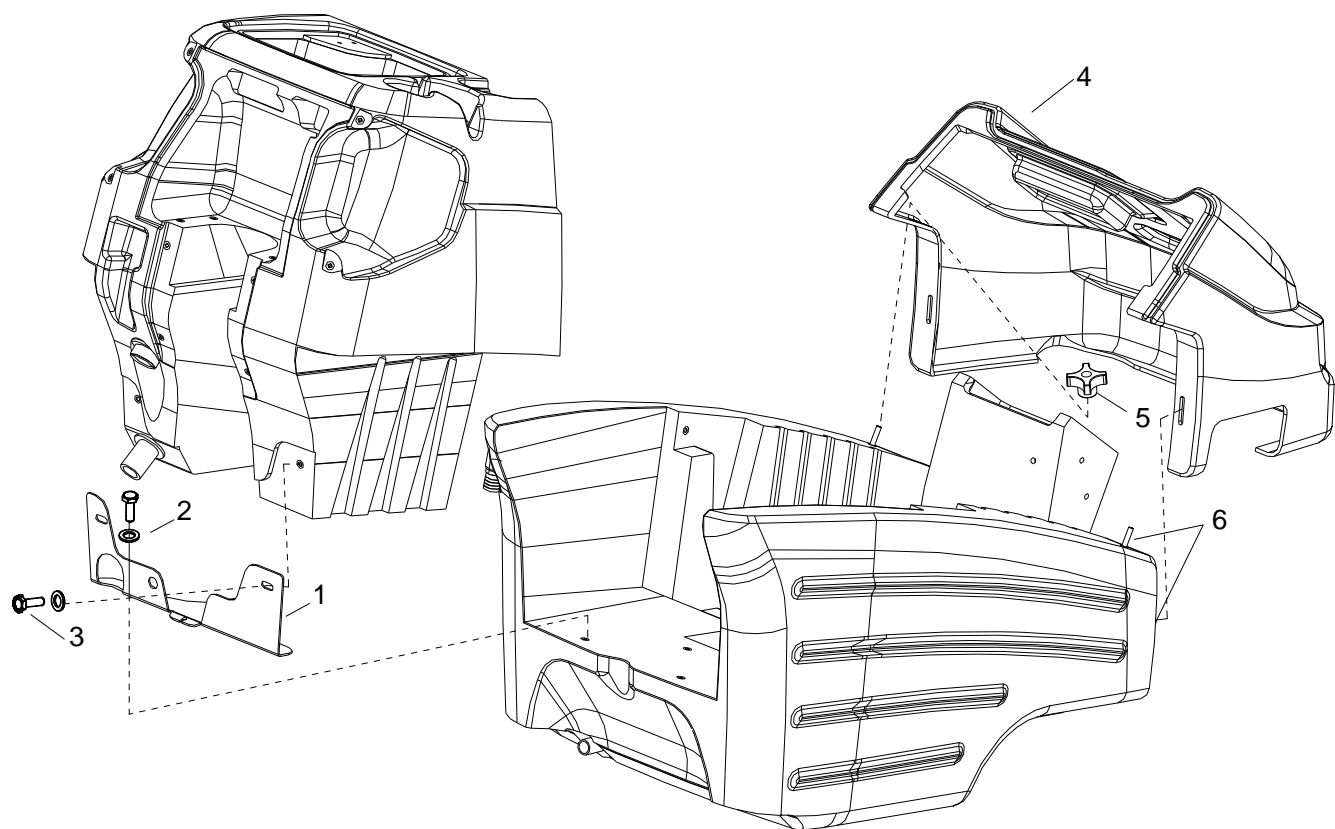
PROBLEM	CAUSE	SOLUTION
Little or no solution flow to the floor	Solution tank empty	Fill solution tank
	Solution flow turned off or set too low	Turn on or increase flow setting
	Solution strainer plugged	Clean solution strainer
	Solution hoses obstructed	Clear obstruction from hose
	Solution solenoid valve obstructed or stuck	Clean or replace
	Vent hole in solution tank lid obstructed	Clear obstruction from vent hole
No power to machine	Battery disconnected	Check all battery cable connections
	Emergency shut-off activated (If included)	Reset
	Battery connections corroded	Clean connections
	Faulty main contactor	Replace contactor
	Faulty key switch	Replace switch
Little or no propel	Low battery charge	Charge batteries
	Wheels spin	Decrease brush pressure
	Controller overheated	Allow cool down period Adjust brush shroud if needed
	Loose connection	Check motor wires and connection
Uneven scrubbing or brush wear	Debris caught in deck linkage	Remove debris
	Worn or damaged deck linkage	Replace worn or damaged parts

Notes:

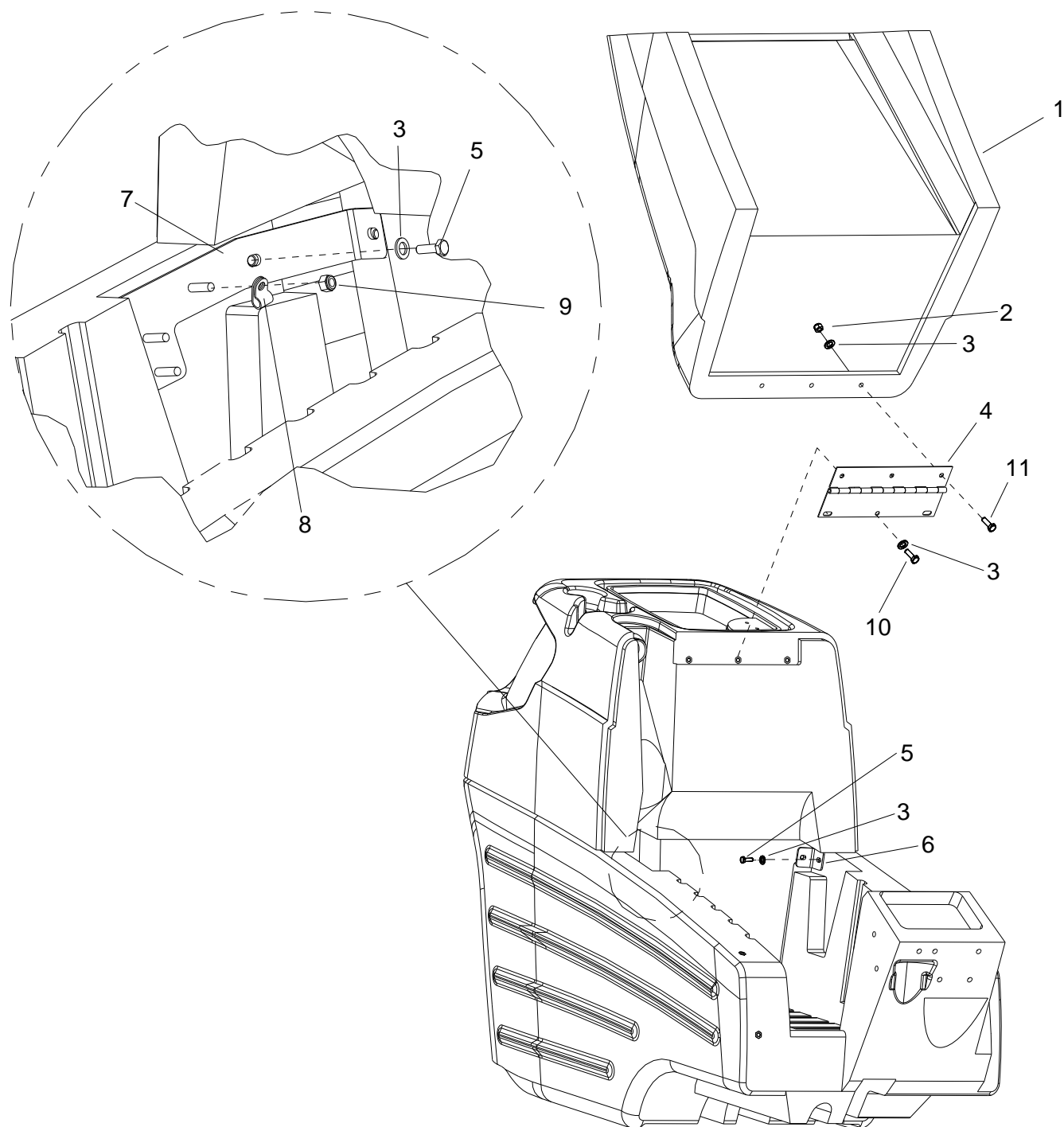
PARTS



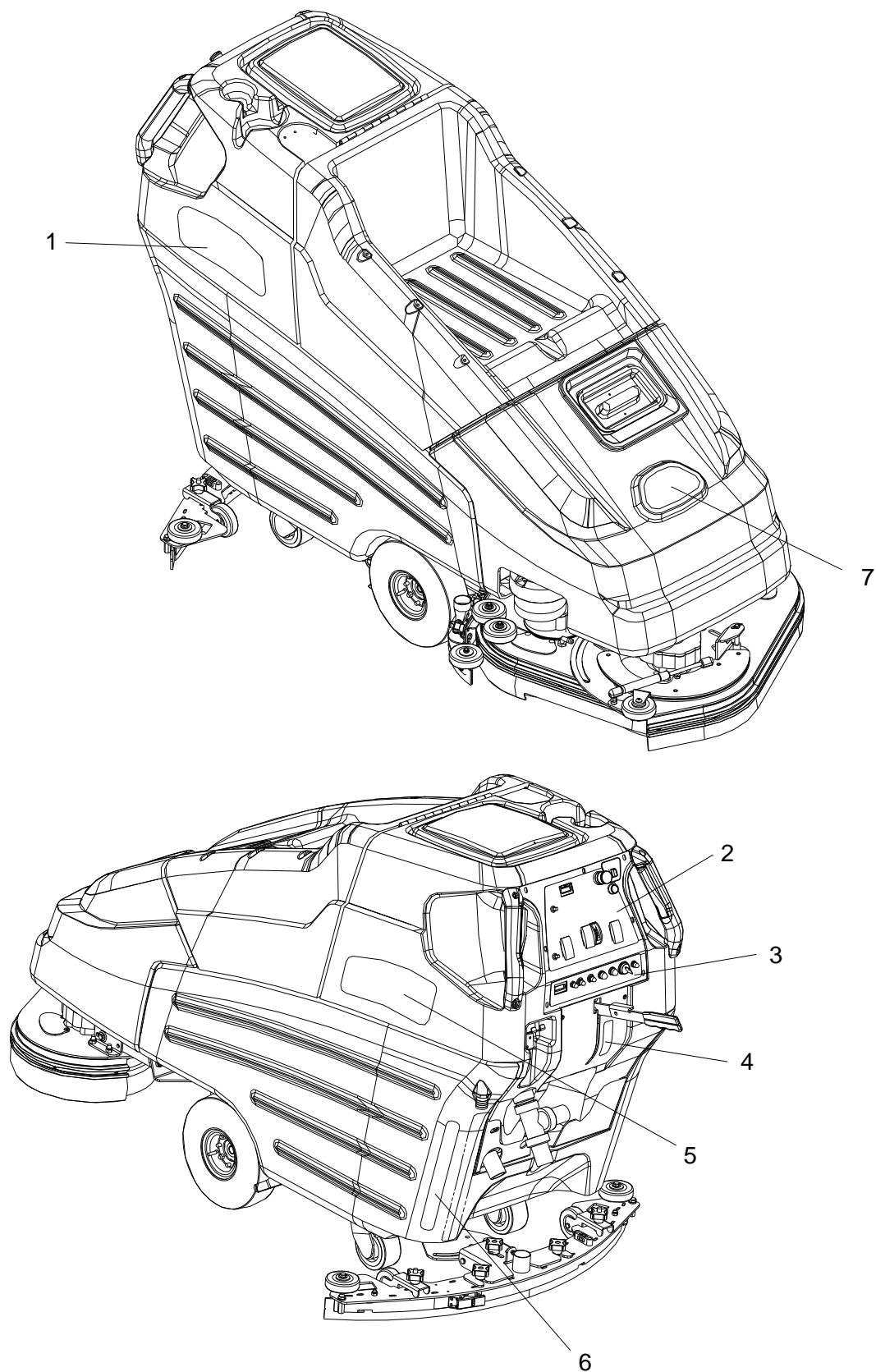
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86238730	1	HANDLE, LEFT		
2	86257230	2	SWITCH SPST MOM NO W/LEVER		
3	86254920	2	SPRING, COMP .24ODX1.25X.018		
4	86231480	2	BUTTON, PROPEL		
5	86277070	2	SCREW, 4-40 X .625 PHPNHMS STL ZNPLT		
6	86240990	2	HOUSING, BUTTON		
7	86277060	4	SCREW, 8-32 X .875 PHPNHTC		
8	86277050	4	SCREW, 5/16-18 X .75 SCHCS SS		
9	86238740	1	HANDLE, RIGHT		
10	86004120	-	PROPEL HANDLE ASM LEFT		SRVC ONLY
11	86004130	-	PROPEL HANDLE ASM RIGHT		SRVC ONLY



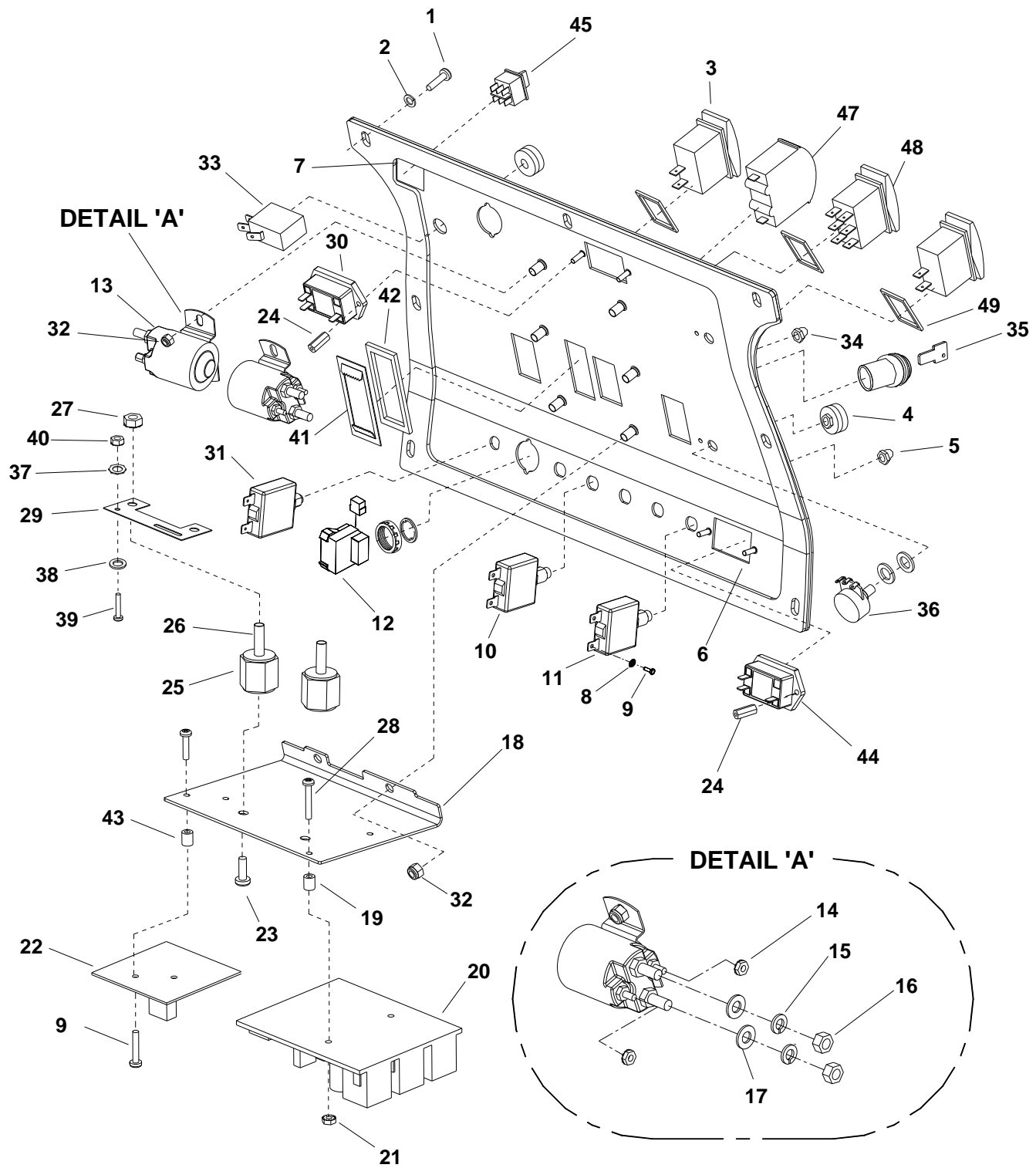
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86069500	1	BRKT, REC TO SOL BACK		
2	86010670	5	WASHER 5/16 FLAT SS		
3	86276780	5	SCREW, 5/16-18 X .75 HHCS SS		
4	86062620	1	COVER, FRONT SQZ PLAY 24V		
5	86004790	2	KNOB, 5/16-18 4 PRONG		
6	86276380	4	SCREW, 5/16-18 X 1.25 SCHSET CP SS		



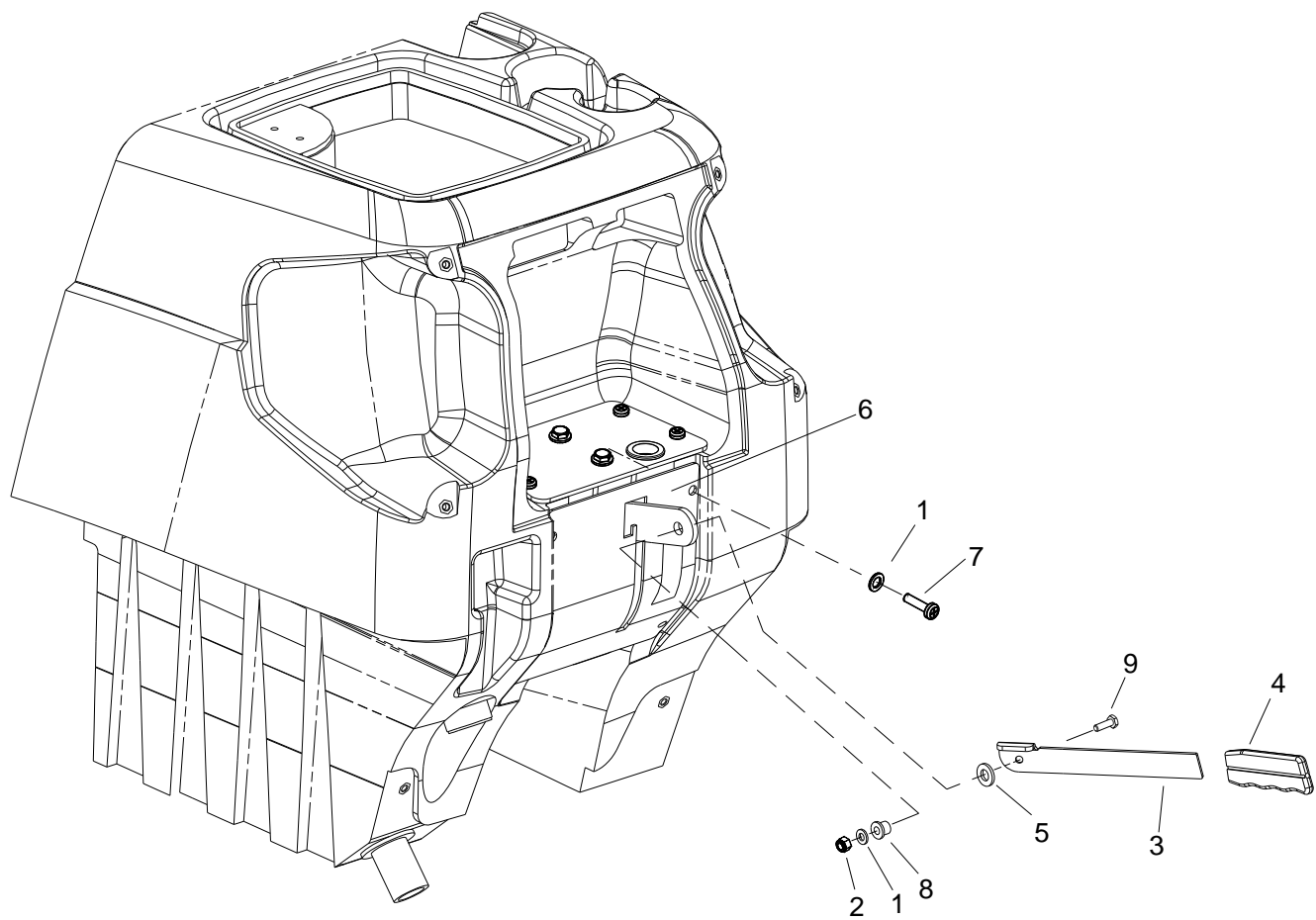
REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86062540	27926	1	COVER, TOP, 24V, GRY		
2	86271840	57285	3	NUT 5/16-18 HEX NYLOCK THIN SS		
3	86010670	87029	10	WASHER 5/16 FLAT SS		
4	86239630	41429	1	HINGE, COVER TO TANK		
5	86276780	70728	4	SCREW, 5/16-18 X .75 HHCS SS		
6	86073700	140484	1	BRTK, TANK LEFT		
7	86069630	140485	1	BRKT, TANK RIGHT		
8	86233390	80887	1	CLAMP, 7/8 DIA "P" CUSHIONED		
9	86271870	57290	1	NUT, 1/4-20 HEXTHIN NYLOCK SS		
10	86276490	70670	3	SCREW, 5/16-18 X .625 HHCS SS		
-	86292630	58004	1	NET, CARGO		NOT SHOWN
11	86276780	70728	3	SCREW, 5/16-18 X .75 HHCS SS		



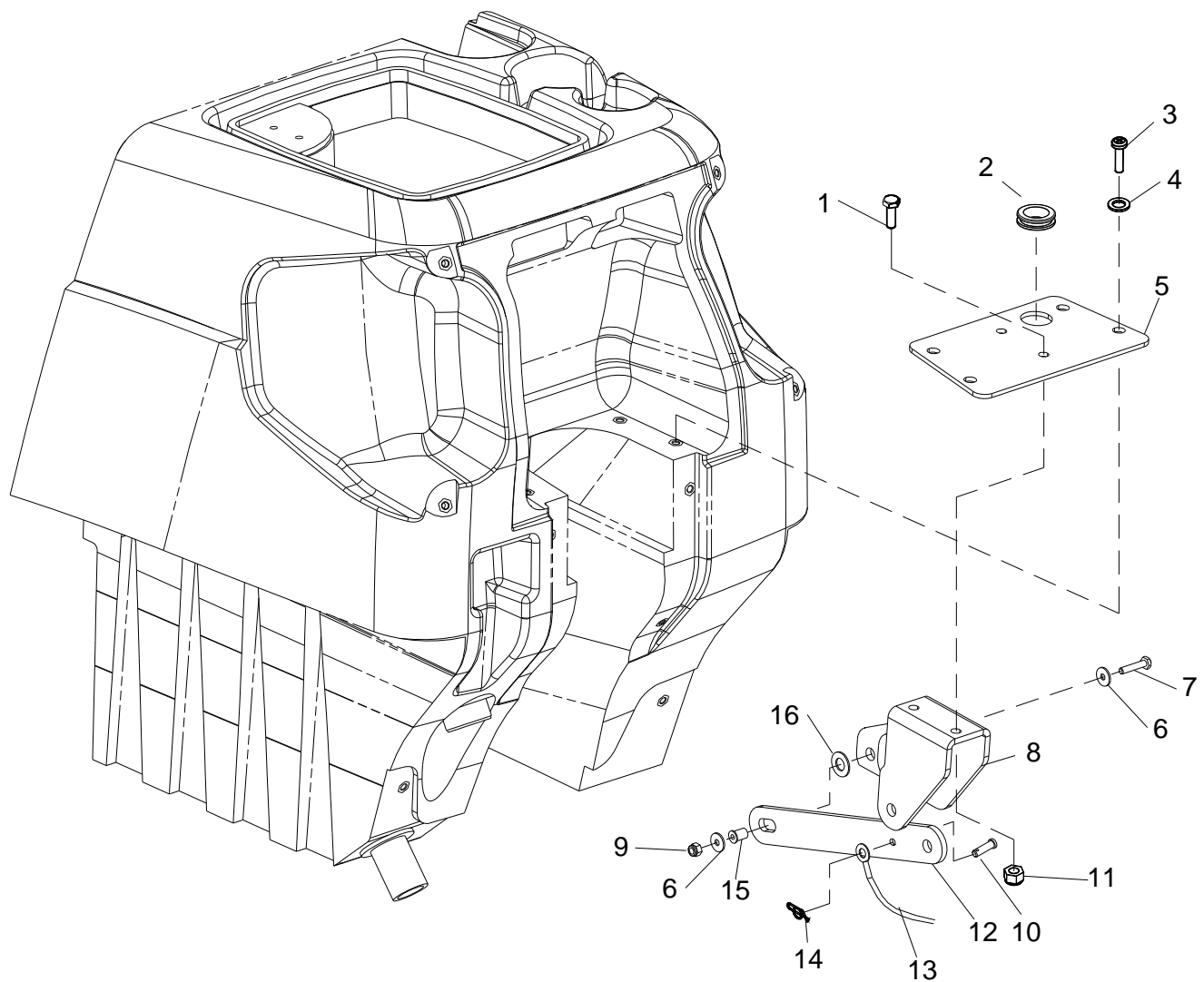
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86243560	1	LABEL, CUTTER RIGHT		
2	86243880	1	LABEL, ELEC. PANEL, SQZ. PLAY		
3	86243530	1	LABEL, ELEC PANEL LOWER 24V		
4	86243600	1	LABEL, SQUEEGEE LEVER		
5	86243550	1	LABEL, CUTTER LEFT		
6	86243180	1	LABEL,SOLUTION FILL 24V		
7	86004970	1	LABEL WINDSOR LOGO DOMED		



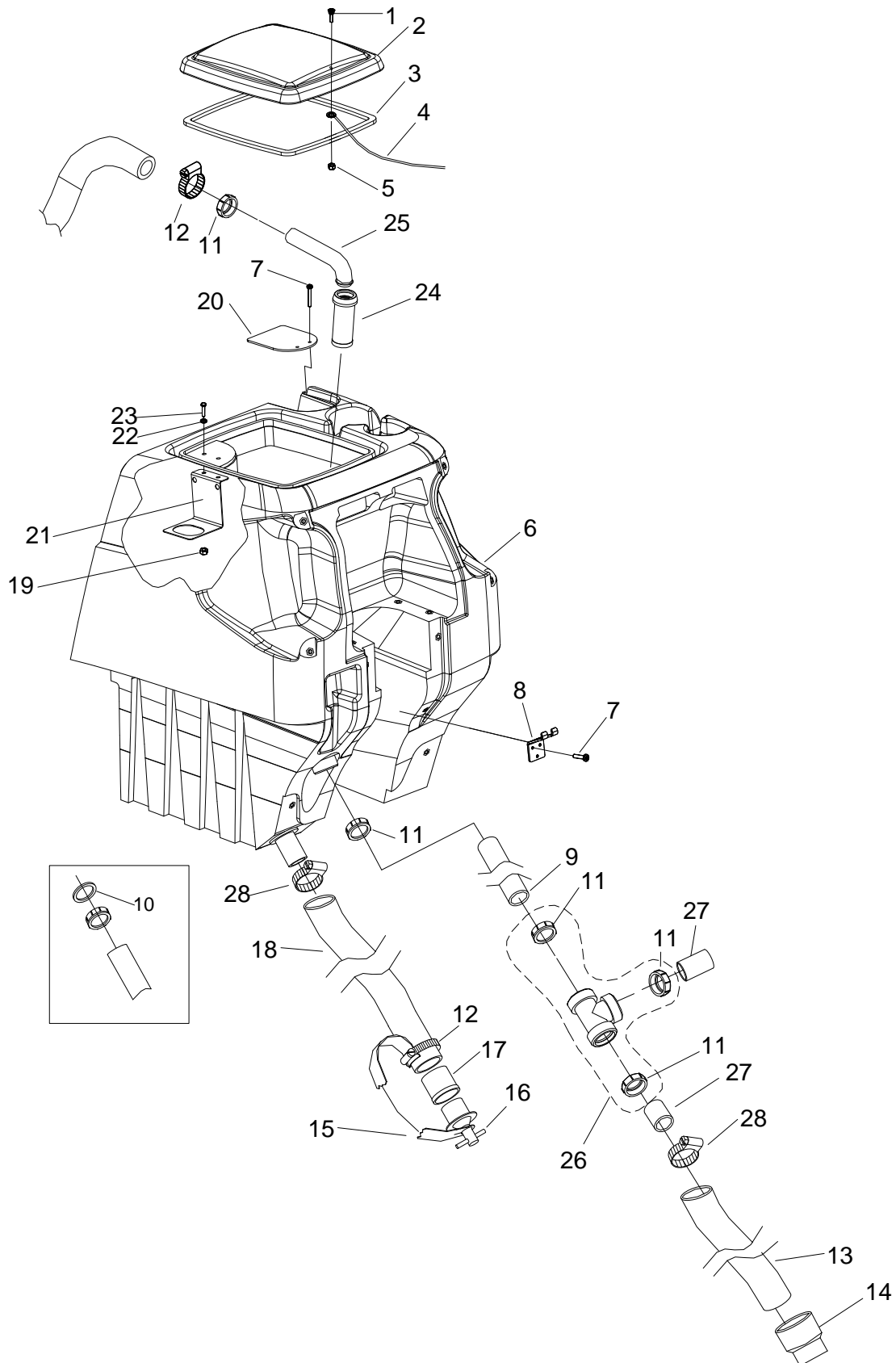
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86276290	7	SCREW, 10 X .75 PHPNHMS BLK ZNPLT		
2	86294250	7	WASHER, .19ID X .5 X .09TK BLK		
3	86007140	2	SWITCH SPST 2-POSITION ROCKER		
4	86242110	2	KNOB, .90 OD X .25 COLLET		
5	86008900	5	BOOT, SEAL-PUSH BUTTON 7/16-28		
6	86082580	1	PLATE, ELECT. PANEL CUTTER 36"		
7	86237800	1	GASKET, ELEC PLATE, 24V		
8	86279300	10	WASHER, 6 X .25 X .031 SPL SS		
9	86273990	14	SCREW, 6-32 X .375 PHPNHMS SS		
10	86001910	2	BREAKER, 30A 50VDC CIRCUIT		
11	86298280	3	BRKR, CIRCUIT, 20A		
12	86007170	1	SWITCH KEY TWO POSITION		
13	86006420	2	RELAY 24VDC 100A		
14	86005700	4	NUT, 10-32 HEXSTRW LK STL ZNPLT		
15	86279480	4	WASHER, 5/16 X .588 X .028 EXTLK		
16	86271080	4	NUT, 5/16-24 HEX STL GRA ZNPLT		
17	86010760	4	WASHER, 5/16 X .688 X .065 FLT STL ZNPLT		
18	86082820	1	PLATE, ELECT. PANEL, BACK		
19	86254440	2	SPACER,.166IDX.313ODX.375L AL		
20	86002950	1	CONTROLLER, 24VDC PROPEL MOTOR		
21	86270850	2	NUT, 8-32 HEX NYLOCK SS		
22	86003250	1	CIRCUIT BOARD SOL FLOAT WIRED		
23	86276880	2	SCREW, 1/4-20 X .375 HHCS SS		
24	86255900	4	STANDOFF, 6-32 X 5/8 HEX NYL		
25	86255910	2	STANDOFF, 1/4-20 X 1.0 HEX INS		
26	86006850	2	SCREW, 1/4-20 X 1.25 SCHSET CP SS		
27	86005710	2	NUT, 1/4-20 HEXSTRW LK STL ZNPLT		
28	86273910	2	SCREW, 8-32 X 1 PHPNHMS SS		
29	86253630	1	SHUNT, DC AMM. 25 AMP, 50MV		
30	86005520	1	METER,24V BATTERY CHARGE LEVEL		
31	86002000	1	BREAKER, 3 AMP 1681-090-300		
32	86271870	6	NUT, 1/4-20 HEXTHIN NYLOCK SS		
33	86257030	1	SWITCH MOMENTARY, DPST		
34	86002010	1	BOOT, 3/8 CIRCUIT BREAKER		
35	86004860	1	KEY, SWITCH		SRVC ONLY
36	86006310	1	POTENTIOMETER, 50K OHMS		SRVC ONLY
37	86279020	2	WASHER, 6 X .305 X .016 EXTLK SS		
38	86279600	2	WASHER, 6 X .312 X .025 FLT BRS		
39	86276250	2	SCREW, 6-32 X .375 SLTDPNHMS BRS		
40	86271790	2	NUT, 6-32 HEX BRS		
41	86249290	1	PLATE, METER RETAINING		
42	86237830	1	GASKET, AMP METER		
43	86255890	2	STANDOFF, 6-32 X 1.0 HEX NYL		
44	86005530	1	METER, 12-48 VDC LED HOUR		
45	86257080	1	SWITCH, DPDT ROCKER W/PADDLE		
45	86267340	2	WIRE, 22" RED/18 76040 X 76075		NOT SHOWN
46	86267360	1	WIRE, 14" BLK/18 76011 X 76040		NOT SHOWN
47	86246940	1	METER, 0-50AMP DC		
48	86007210	1	SWITCH, DPDT 3-POSITION ROCKER		
49	86238030	3	GASKET, SWITCH CARLING		



REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86010670	5	WASHER 5/16 FLAT SS		
2	86271840	1	NUT 5/16-18 HEX NYLOCK THIN SS		
3	86066860	1	BAR, SQG LIFT SWING 36V		
4	86238360	1	GRIP, 3/16 X 1.0 ORANGE		
5	86259400	1	WASHER, THRUST .51ID X 1OD BRO		
6	86082390	1	PLATE, LEVER NOTCH DELUXE		
7	86276780	4	SCREW, 5/16-18 X .75 HHCS SS		
8	86228840	1	BUSHING, .314 X .502 X .5 FLG		
9	86006930	1	SCREW, 5/16-18 X 1 SCHBTNHCS SS		



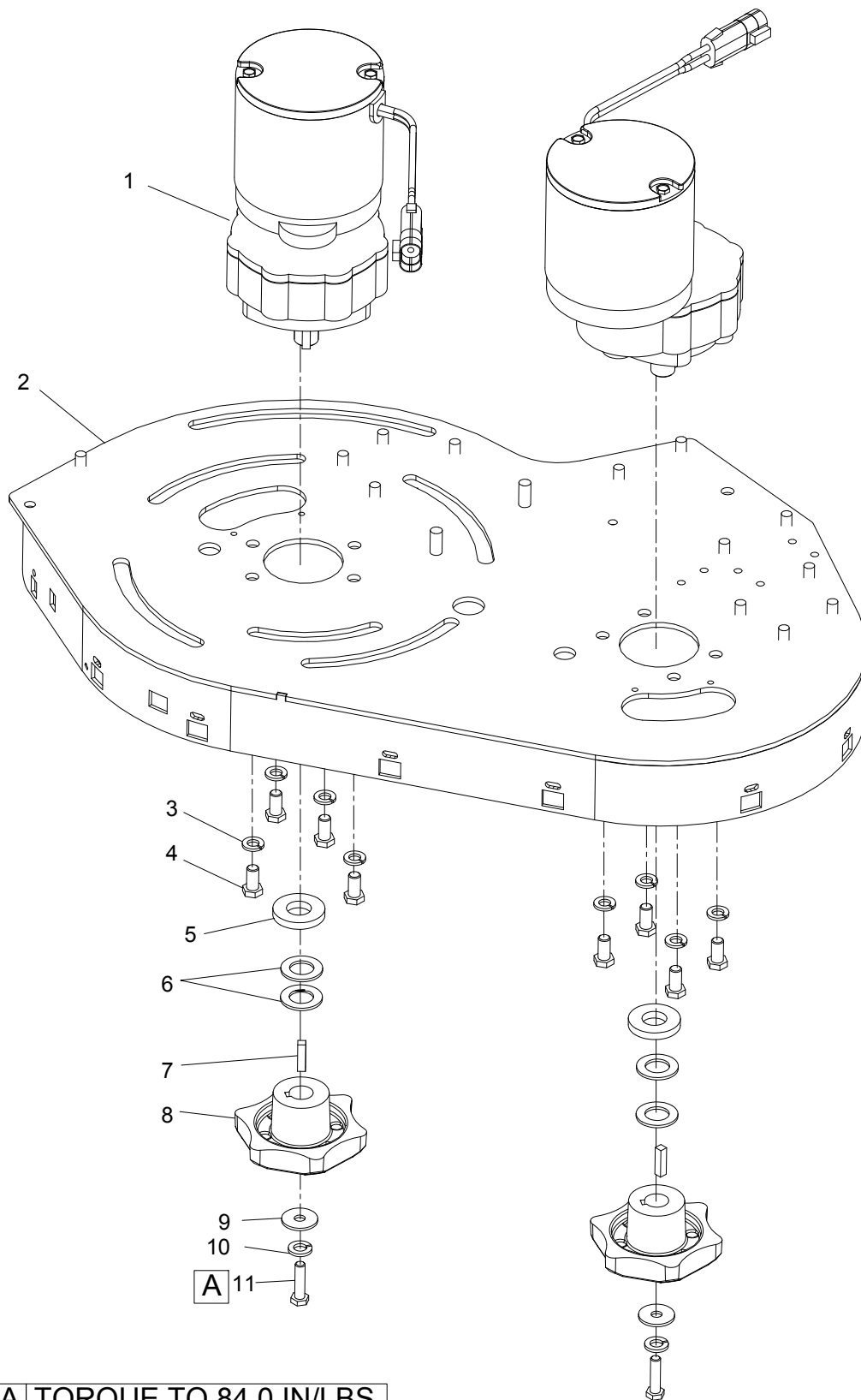
REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86276920	70755	2	SCREW, 3/8-16 X 1 HHCS SS NP		
2	86238430	36191	1	GROMMET 1.00 ID 3/16 GRIP		
3	86276780	70728	4	SCREW, 5/16-18 X .75 HHCS SS		
4	86010670	87029	4	WASHER 5/16 FLAT SS		
5	86082270	62946	1	PLATE, PIVOT		
6	86010630	87013	2	WASHER, 1/4 X .625 FLT SS		
7	86273820	70019	1	SCREW, 1/4-20 X 1.25 HHMS SS		
8	86069610	140482	1	BRACKET, SCRUB DECK PIVOT 24V		
9	86271870	57290	1	NUT, 1/4-20 HEX NYLOCK THIN SS		
10	86009560	82053	1	PIN, CLEVIS 1/4" X 5/8" PLTD		
11	86005630	57022	2	NUT, 3/8-16 HEX NYLOCK THIN SS		
12	86077480	51365	1	LINK, SQG LIFT FIXED		
13	86003240	27942	1	CABLE, .125 X 26.5 0707 SS LB E-E		
14	86008650	80604	1	COTTER, 1/4" RING		
15	86228900	09138	1	BEARING, FLANGED .252ID X .503OD		
16	86259400	87205	1	WASHER, THRUST .51ID X 1OD BRO		
17	86278910	87003	2	WASHER, 3/8 ID X 7/8 OD SS		



REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86274220	1	SCREW, 6-32 X .625 PHPNHMS SS		
2	86003340	1	DOME, 13 X 11		
3	86003990	1	GASKET, DOME		
4	86246080	1	LANYARD, 18.0 W/ LOOP & EYE		
5	86014810	1	NUT, 6-32 ACORN SS		
6	86032540	1	TANK, REC, 24V, GRY		
7	86276290	5	SCREW, 10 X .75 PHPNHMS BLK ZNPLT		
8	86001190	1	BRKT, RECOVERY HOSE MTG		
9	86089630	1	TUBE, 1.5 PVC X 24.0		
10	86237650	5	GASKET, 1 1/2 COMPRESSION		
11	86372080	5	NUT 1.5 SLIP JOINT		
12	86002400	2	CLAMP, 2.0" WORM GEAR X .312W		
13	86004180	1	HOSE 1.5 BLK VAC X 28"		
14	86002840	1	CUFF, 1.5 SLIP X 1.5 HOSE		
15	86008400	1	TETHER, DRAIN PLUG		
16	86006240	1	DRAIN PLUG 1 1/4"		
17	86004450	1	HOSEBARB, 1.5 DOUBLE MCHD		
18	86004260	1	HOSE 1.5 X 24.0 DRAIN		
19	86271870	2	NUT, 1/4-20 HEXTHIN NYLOCK SS		
20	86075540	1	COVER, VACUUM HOSE		
21	86069780	1	BRKT, VAC INTAKE		
22	86010630	2	WASHER, 1/4 X .625 FLT SS		
23	86273810	2	SCREW, 1/4-20 X 1 HHCS SS		
24	86236410	1	FLOAT VAC SHUT OFF		
25	86257860	1	TUBE, 1.5 WASTE		
26	86257350	1	TEE, COMPRESSION 1.5 TUBULAR		
27	86089640	2	TUBE, 1.5ODX.070WX2.80L PVC		
28	86233140	2	CLAMP, 2.0" WORM GEAR		

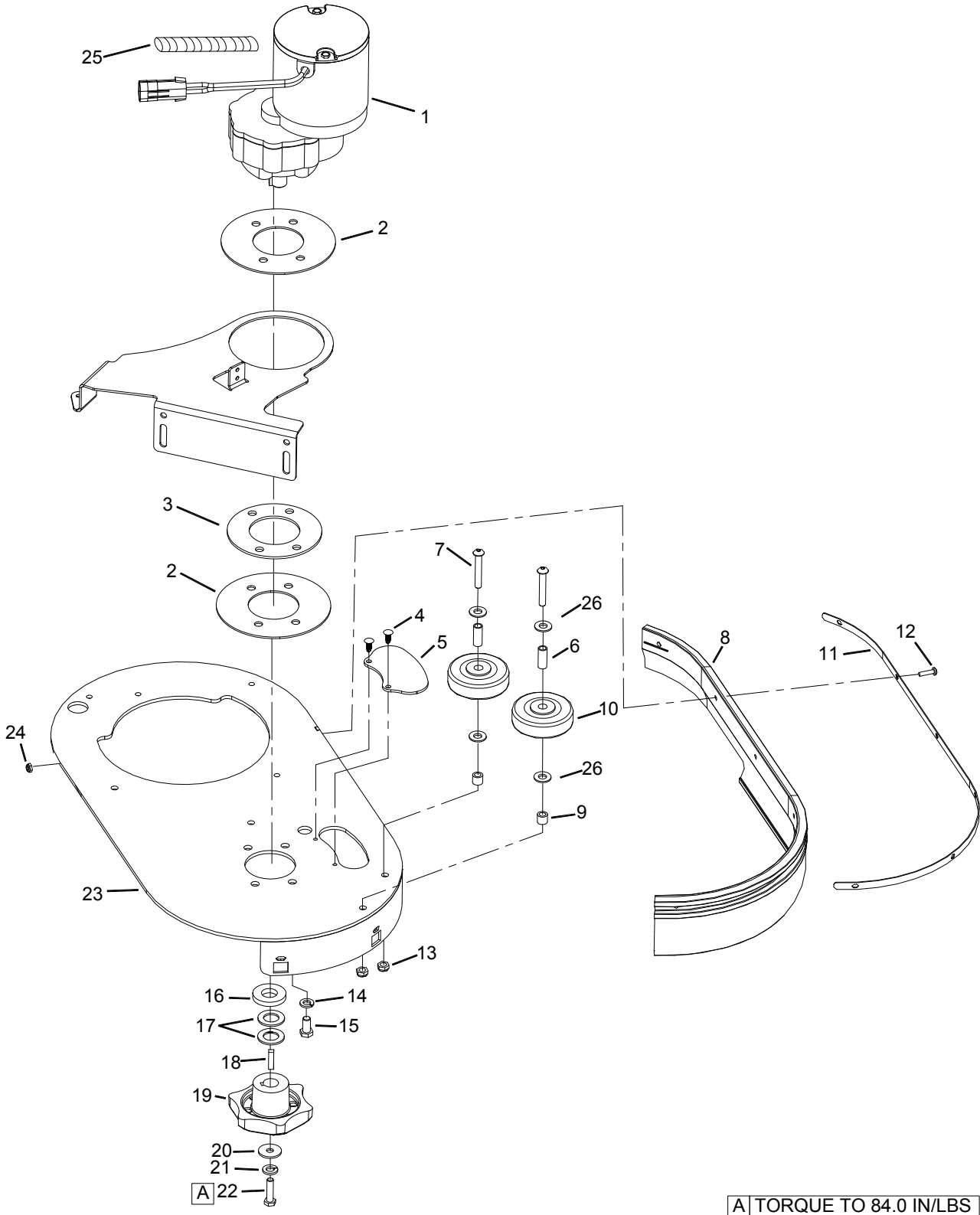


REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86000170	2	PAD DRIVER, 12" SD		
2A	86000180	2	BRUSH 12" POLYPROPYLENE SD		
2B	86000190	2	BRUSH 12" NYLON SD		
2C	86000200	2	BRUSH 12" MILD GRIT SD		
3	86005070	1	LOCK PAD CENTER SNAP,TWO STEP		
4	86276590	3	SCREW, 12-11 X 1 PHPNHSMS SS TYPEA		
5	86276580	4	SCREW, 8-32 X .75 PHTRHMS SS		
6	86276600	3	SCREW, 10-12 X .75 PHTRHSMS SS TYPEA		
7	86007910	1	SPRING EXT .31D X 2.0L X .03W		
8	86007280	1	SOCKET, DRIVE BRUSH		
9	86005940	1	PLATE BRUSH RELEASE		



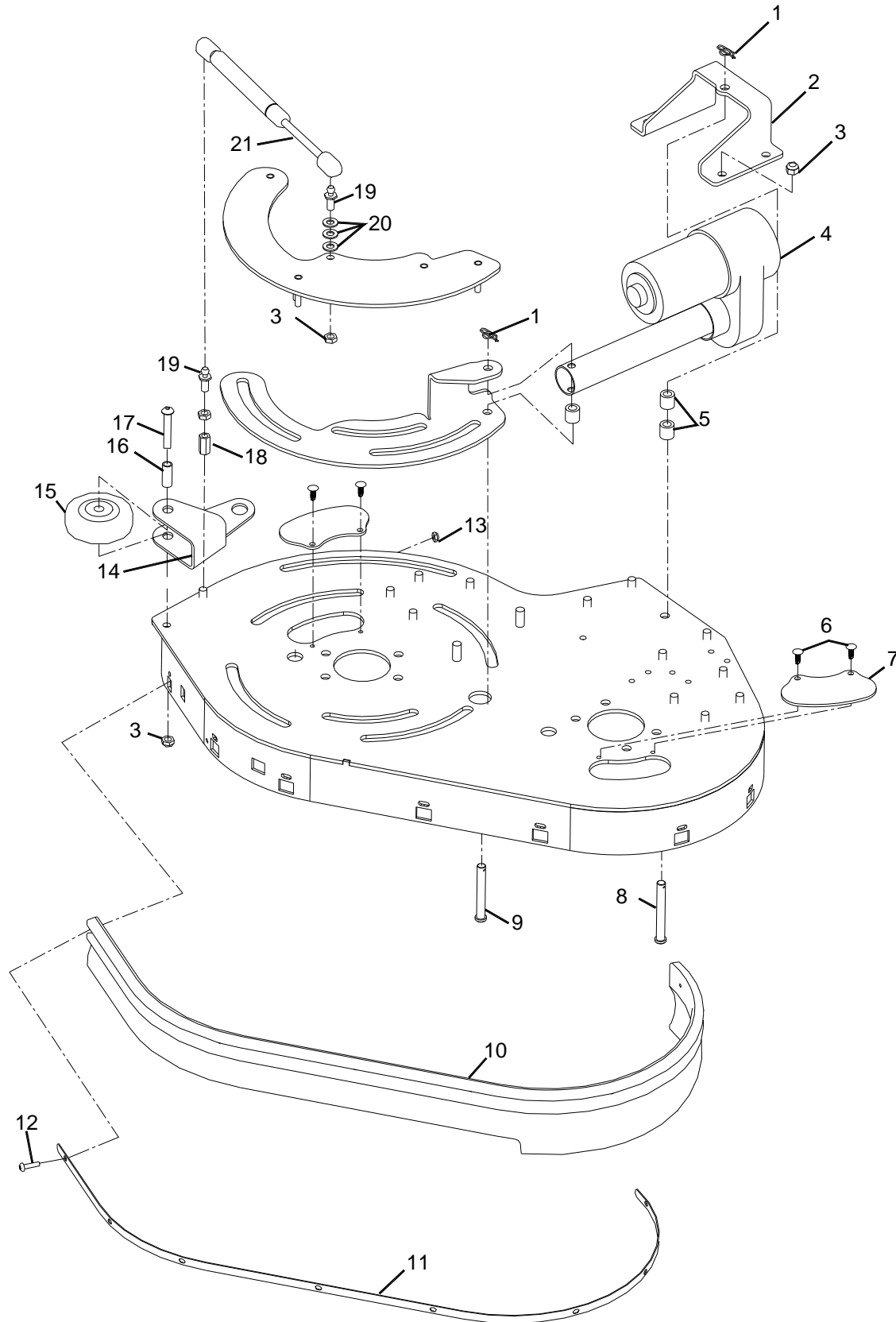
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86361810	2	MOTOR ASM, 36VDC 300RPM GEAR	*(3)	
-	86216170	-	BRUSH SET MOTOR 53644		SERVICE ONLY
2	86092450	1	FRAME, SQZ PLAY ASM, L		
3	86010790	8	WASHER, 3/8 X .680 X .094 SPL STL ZNPLT		
4	86276970	8	SCREW, 3/8-16 X .75 HHCS SS		
5	86279640	2	WASHER, .780 X 1.63 X .25 FLT YW ZNPLT		
6	86279530	4	WASHER, 3/4 X 1.312 X .09 FLT PSVT		
7	86004810	2	KEY, 1/4 X 1/4 X 1 LCSTL		SUPP W/ MTR
8	86003420	2	DRIVER, BRUSH SD		
9	86279630	2	WASHER, 5/16 X 1.13 X .09 FLT		
10	86279130	2	WASHER, 5/16 X .583 X .078 SPL STL ZNPLT		
11	86007020	2	SCREW, 5/16-18 X 1.25 HHCS SS NP		

Scrubdeck Right Frame

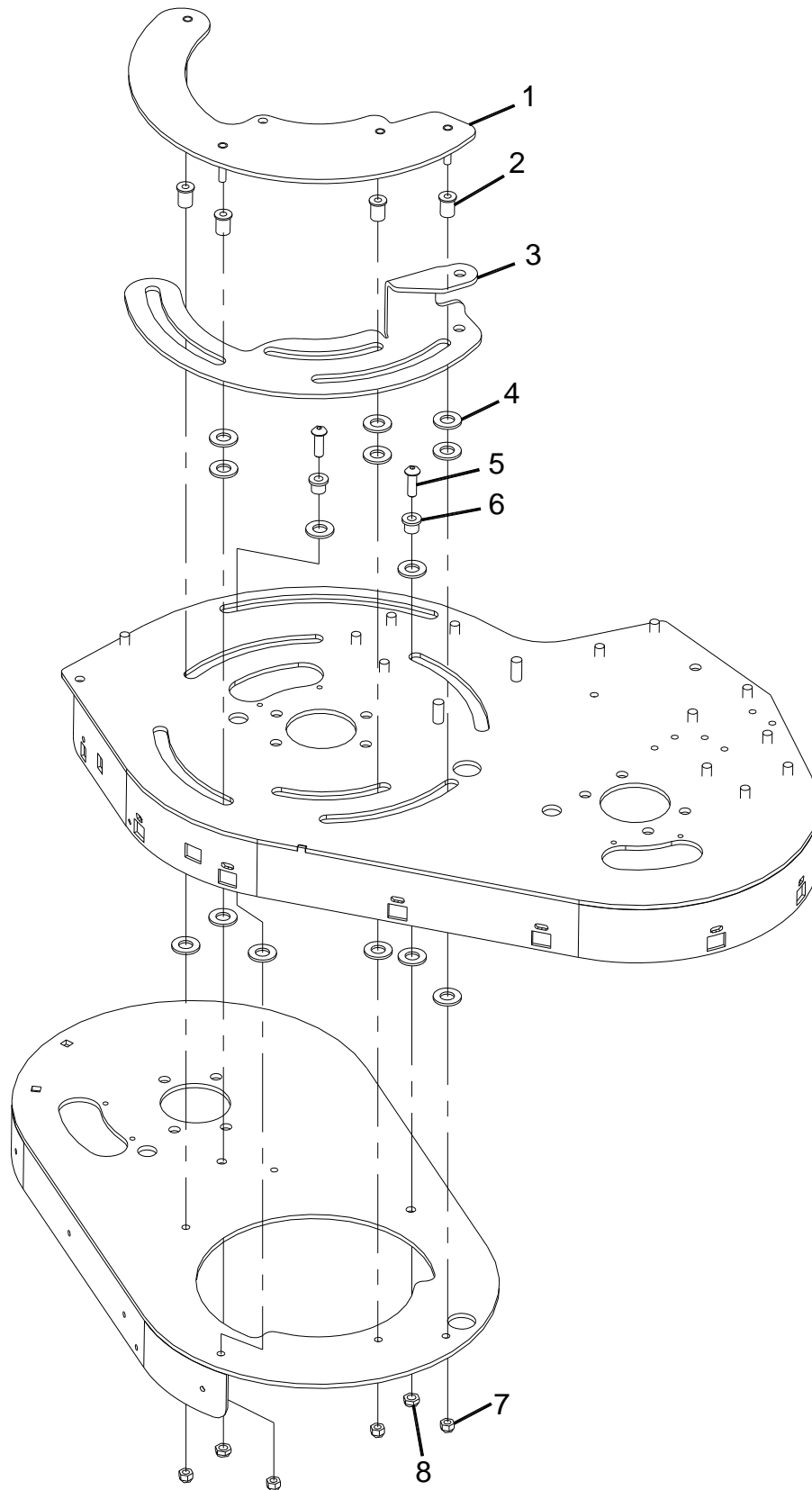


A | TORQUE TO 84.0 IN/LBS

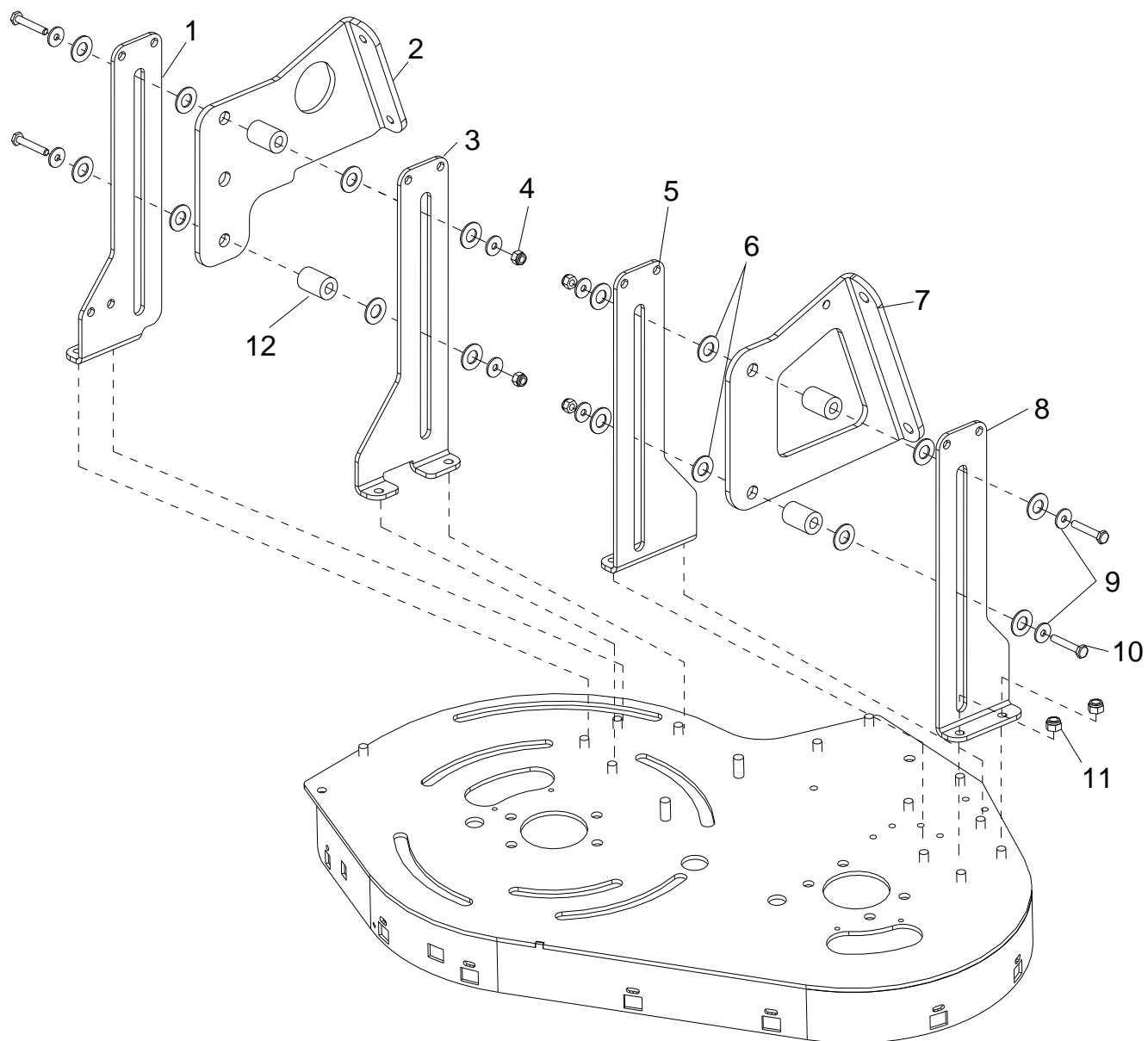
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86361810	1	MOTOR ASM, 36VDC 300RPM GEAR	*(3)	
2	86065050	2	SPACER, SIDE SQG		
3	86065040	1	SPACER, TOP SQG LINKAGE		
4	86233560	2	CLIP, TREE .19 HOLE FLAT HEAD		
5	86234820	1	COVER, BRUSH RELEASE		
6	86001350	2	BUSHING, SPANNER .435 X 1.10		
7	86277150	2	SCREW, 5/16-18 X 2 SCHBTNHCS SS		
8	86253980	1	SKIRT, 3.5 X 29 EXT		
9	86007650	2	SPACER, .438D X .317ID X .25L		
10	86011020	2	WHEEL 3" DIA CUSHION RUBBER		
11	86087990	1	STRAP, SKIRT RIGHT		
12	86274070	6	SCREW, 10-24 X .5 PHPNHMS SS		
13	86271840	2	NUT 5/16-18 HEX NYLOCK THIN SS		
14	86010790	4	WASHER, 3/8 X .680 X .094 SPL STL ZNPLT		
15	86276920	4	SCREW, 3/8-16 X 1 HHCS SS NP		
16	86279640	1	WASHER, .780 X 1.63 X .25 FLT YW ZNPLT		
17	86279530	2	WASHER, 3/4 X 1.312 X .09 FLT PSVT		
18	86004810	1	KEY, 1/4 X 1/4 X 1 LCSTL		SUPP W/ MTR
19	86003420	1	DRIVER, BRUSH SD		
20	86279630	1	WASHER, 5/16 X 1.13 X .09 FLT		
21	86279130	1	WASHER, 5/16 X .583 X .078 SPL STL ZNPLT		
22	86007020	1	SCREW, 5/16-18 X 1.25 HHCS SS NP		
23	86092440	1	FRAME, SQZ PLAY ASM, R		
24	86271900	6	NUT, 10-24 HEXTHIN NYLOCK SS		
25	86279930	1	DUCT, 1/2 ID SPLT FLX X 16"		
26	86010670	4	WASHER 5/16 FLAT SS		



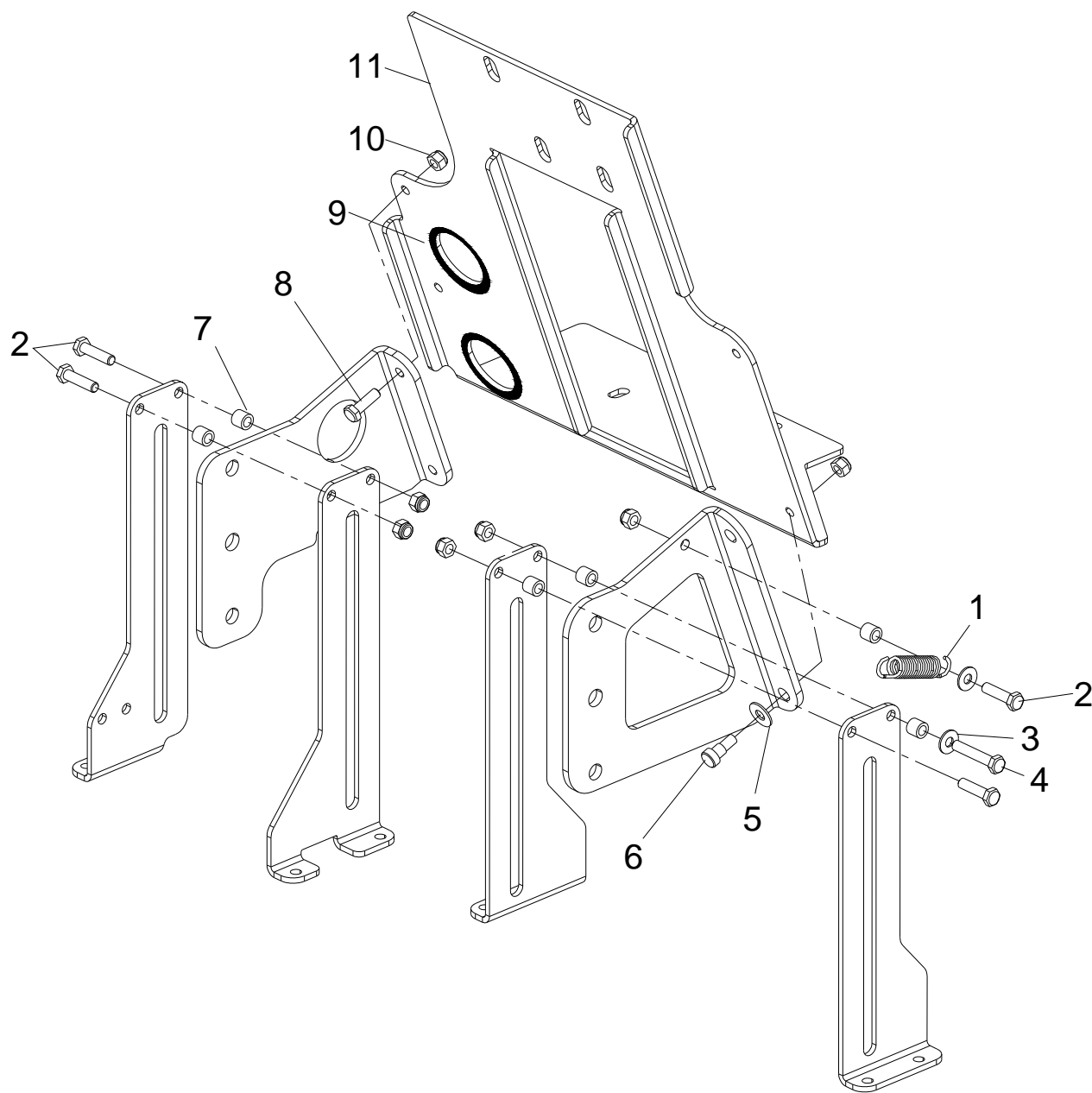
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86008670	2	COTTER 3/8" RING		
2	86070290	1	BRKT, ACTUATOR MOUNT		
3	86271840	6	NUT 5/16-18 HEX NYLOCK THIN SS		
4	86014670	1	SP ACTUATOR, 24V 4.9 STROKE DBLS		
5	86231280	3	BUSHING, .377 X .627 X .63		
6	86233560	4	CLIP, TREE .19 HOLE FLAT HEAD		
7	86234820	2	COVER, BRUSH RELEASE		
8	86272530	1	PIN, CLEVIS 3/8 X 3 STL ZNPLT		
9	86272520	1	PIN, CLEVIS 3/8 X 2.75 STL ZNPLT		
10	86253970	1	SKIRT, 3.5 X 40 EXT		
11	86087980	1	STRAP, SKIRT LEFT		
12	86274070	8	SCREW, 10-24 X .5 PHPNHMS SS		
13	86271900	8	NUT, 10-24 HEXTHIN NYLOCK SS		
14	86070390	1	BRKT, BUMPER WHEEL MOUNT		
15	86011020	1	WHEEL 3" DIA CUSHION RUBBER		
16	86001350	1	BUSHING, SPANNER .435 X 1.10		
17	86277150	1	SCREW, 5/16-18 X 2 SCHBTNHCS SS		
18	86271950	1	NUT, 5/16-18 X 1 COUPLING SS		
19	86256500	2	STUD, BALL GAS SPRING		
20	86010670	3	WASHER, 5/16 FLAT SS		
21	86254930	1	SPRING, GAS 9.6 300 NEWTONS		



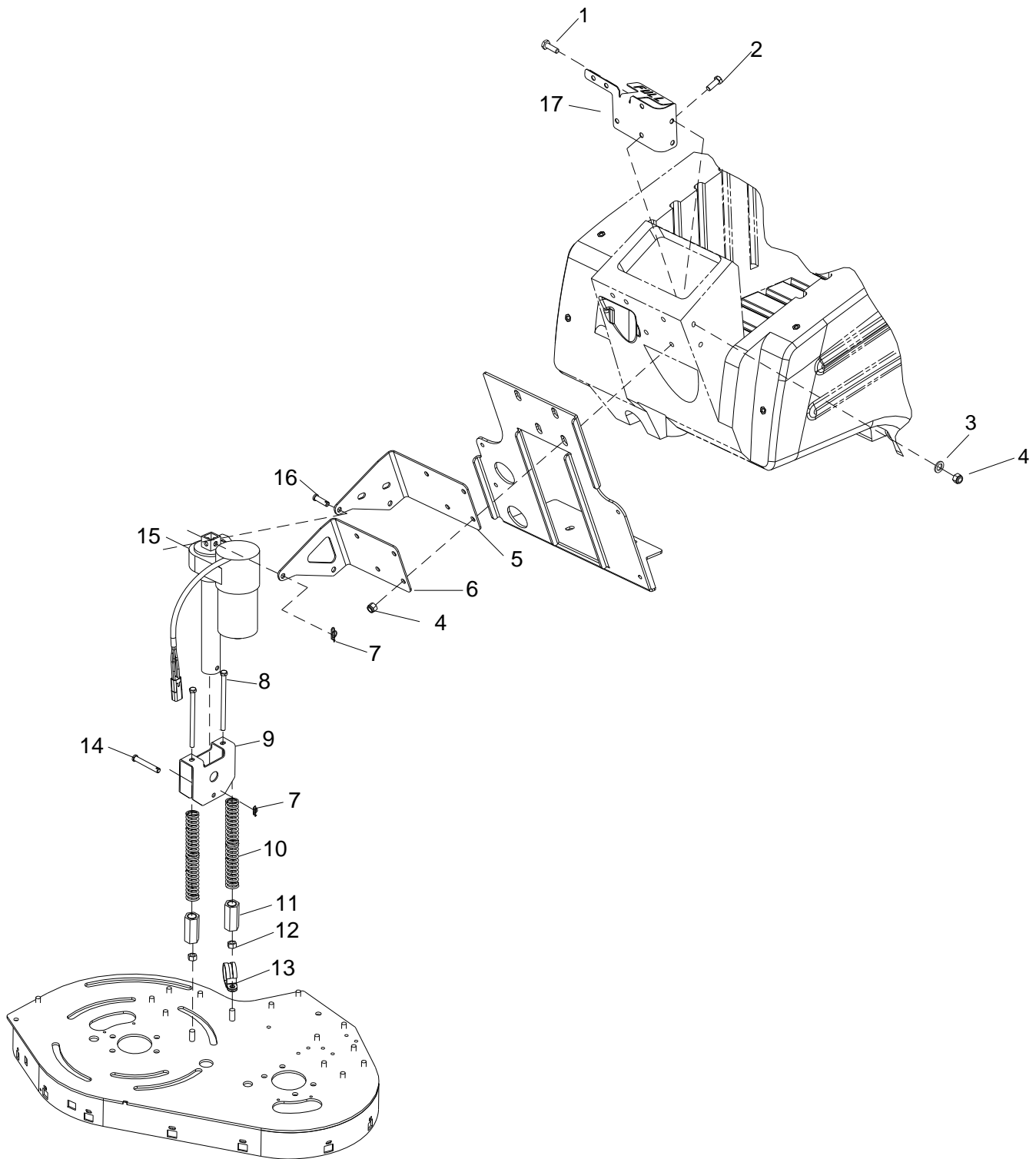
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86070360	1	BRKT, SQZ PLAY SLIDER		
2	86228900	4	BUSHING, .252 X .503 X .75 FLG		
3	86070260	1	BRKT, SIDE ACTUATOR		
4	86259420	14	WASHER, .510 X 1 X .093 THR		
5	86006930	2	SCREW, 5/16-18 X 1 SCHBTNHCS SS		
6	86228840	2	BUSHING, .314 X .502 X .5 FLG		
7	86271870	4	NUT, 1/4-20 HEXTHIN NYLOCK SS		
8	86271840	2	NUT 5/16-18 HEX NYLOCK THIN SS		



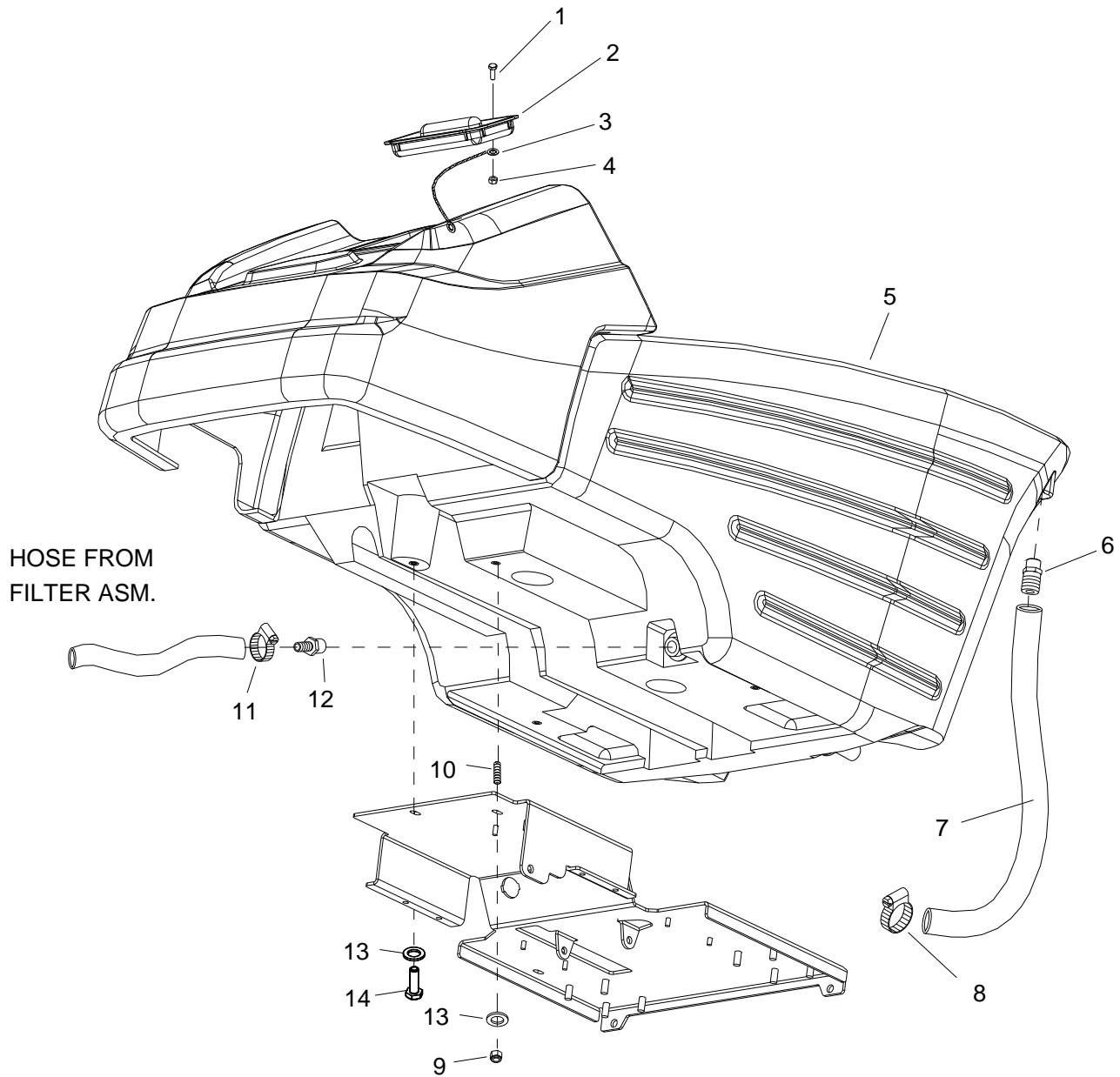
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86076170	1	GUIDE, SQZ PLAY DECK, RR		
2	86070280	1	BRKT, DECK LINKAGE RIGHT		
3	86076160	1	GUIDE, SQZ PLAY DECK, RL		
4	86271870	4	NUT, 1/4-20 HEXTHIN NYLOCK SS		
5	86076150	1	GUIDE, SQZ PLAY DECK LL		
6	86259410	16	WASHER, .510 X 1 X .063 THR		
7	86070270	1	BRKT, DECK LINKAGE LEFT		
8	86076140	1	GUIDE, SQZ PLAY DECK LR		
9	86010630	8	WASHER, 1/4 X .625 FLT SS		
10	86273740	4	SCREW, 1/4-20 X 1.5 HHCS SS		
11	86271840	8	NUT 5/16-18 HEX NYLOCK THIN SS		
12	86228920	4	BEARING, .252 ID X.503 ODX.1.0		



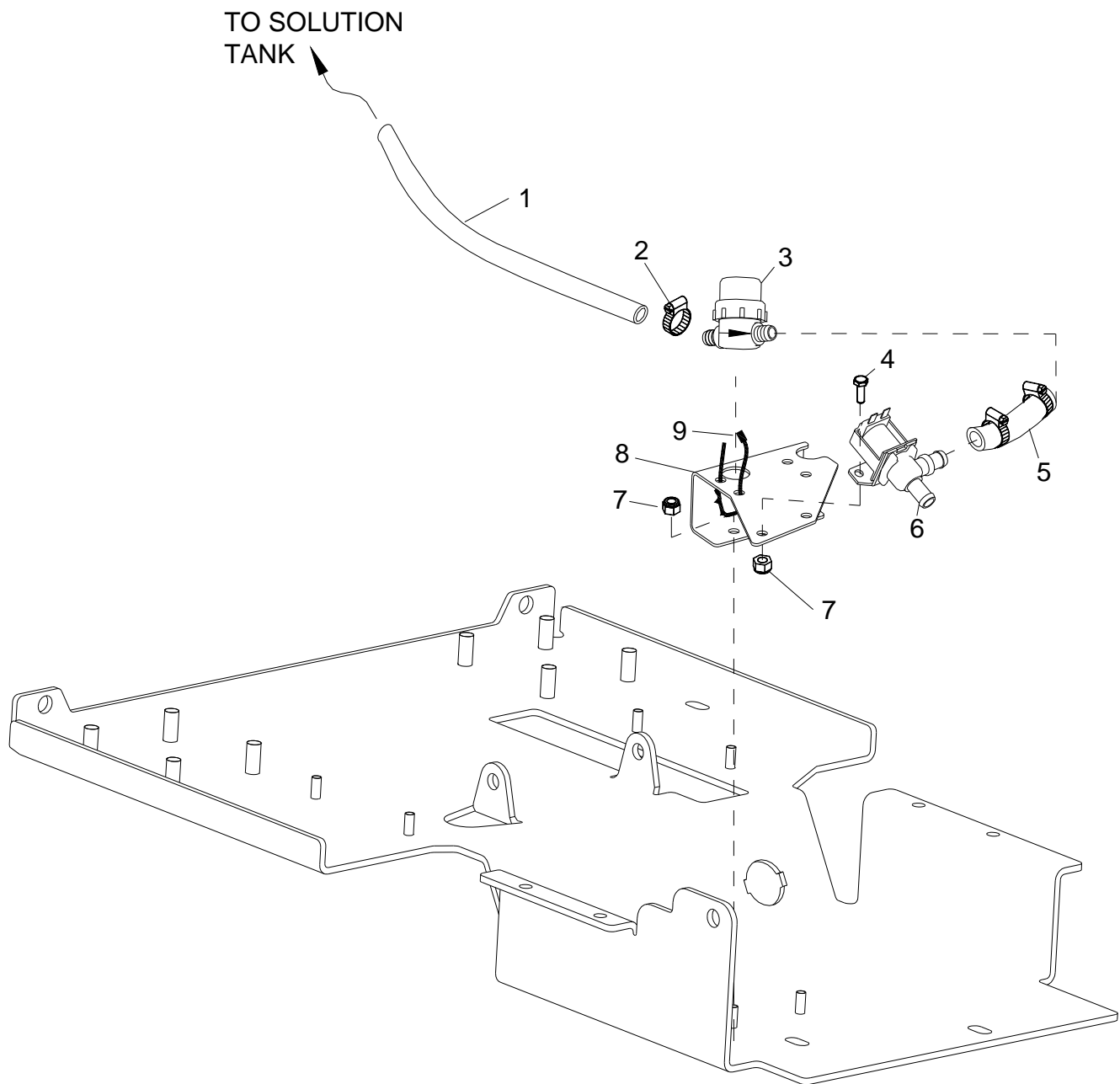
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86226830	1	SPRING EXT .68D X3.00L X.098W		
2	86007020	4	SCREW, 5/16-18 X 1.25 HHCS SS NP		
3	86010670	2	WASHER 5/16 FLAT SS		
4	86276790	1	SCREW, 5/16-18 X 1.75 HHCS SS		
5	86278910	2	WASHER, 3/8 X .875 X .05 FLT SS		
6	86278330	2	SHOULDER BOLT, 3/8 X .375L SS		
7	86224290	6	SPACER, .317ID X .5OD X .44LG		
8	86006560	2	SCREW, 5/16-18 X 1 HHCS SS NP		
9	86238510	2	GROMMET, 1.75ID X2.50OD X .25		
10	86271840	9	NUT 5/16-18 HEX NYLOCK THIN SS		
11	86075860	1	FRAME, MAINT TOWER		



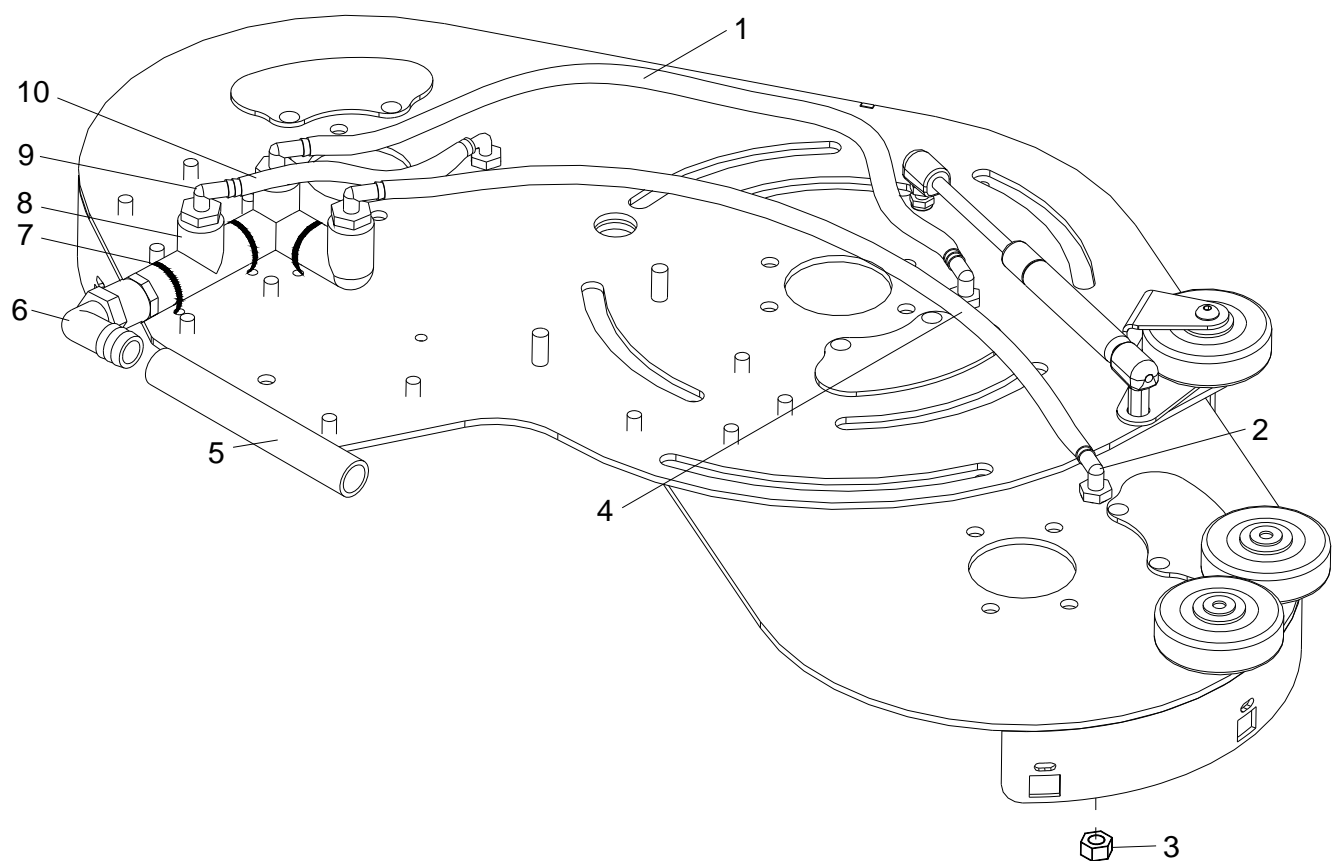
REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86276920		2	SCREW, 3/8-16 X 1 HHCS SS NP		
2	86276430		4	SCREW, 3/8-16 X 1.75 HHCS SS		
3	86279590		2	WASHER, 3/8 SEG STL GALV		WAS 87003
4	86005630		6	NUT, 3/8-16 HEXTHIN NYLOCK SS		
5	86070230		1	BRKT, ACTUATOR MOUNT REAR		
6	86070240		1	BRKT, ACTUATOR MOUNT FRONT		
7	86008670		2	COTTER 3/8" RING		
8	86276670		2	SCREW, 3/8-16 X 6 HHCS SS		
9	86068140		1	BRACKET, ACTUATOR TUBE		
10	86255280		4	SPRING, COMP .97 OD X 3.5 L		
11	86005840		2	NUT, 3/8-16 CPL SS		
12	86005730		2	NUT, 3/8-16 HEX STL GRA ZNPLT		
13	86233410		1	CLAMP, 3/4 DIA CUSHION .406DIA		
14	86248970		1	PIN, CLEVIS 3/8 X 2 STL ZNPLT		
15	86011960		1	ACTUATOR, 24VDC 5.0 STRK		
16	86272410		1	PIN, CLEVIS 3/8 X 1.625 STL ZNPLT		
17	86069930		1	BRKT, SOLUTION FILL		



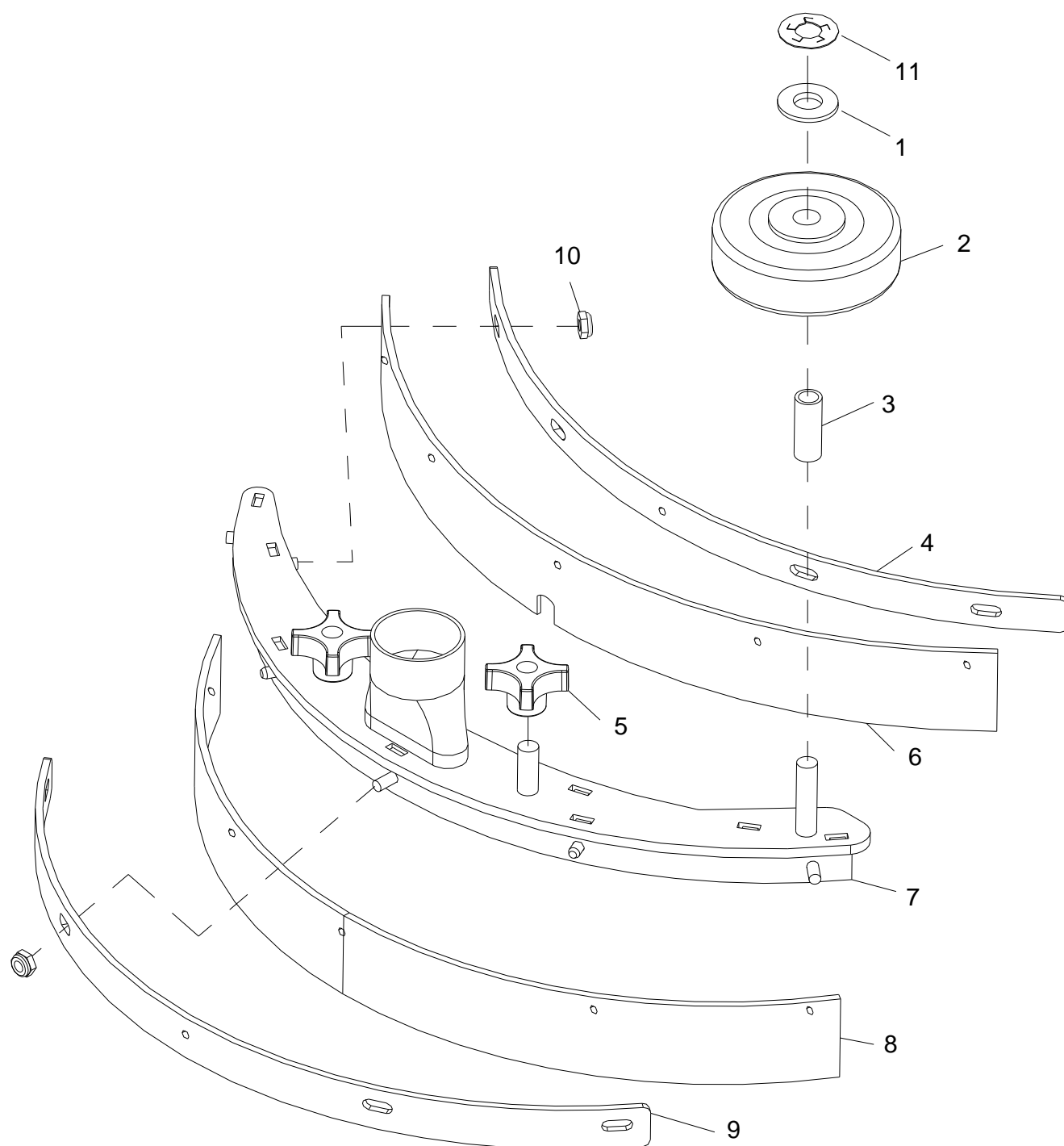
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86273950	1	SCR, 6-32 X 1/2 PPHMS SS		
2	86234790	1	COVER, CLP SOLUTION		
3	86246080	1	LANYARD, 18.0 W/LOOP & EYE		
4	86014810	1	NUT, 6-32 ACORN SS		
5	86008270	1	TANK SOLUTION, 24V, BLU		
6	86240460	1	HOSEBARB 1/2MPT X 1.0 HOSE		
7	86282050	1	HOSE 1ID X .12W CLR X 24.5"		
8	86233110	1	CLAMP, 1.0" WORM GEAR		
9	86271840	3	NUT 5/16-18 HEX NYLOCK THIN SS		
10	86276380	3	SCREW, 5/16-18 X 1.25 SCHSET CP SS		
11	86233150	1	CLAMP, 3/8 HOSE (D-SLOT)		
12	86197910	1	HOSEBARB 1/2 MPT X 1/2 POLY DL		
13	86010670	4	WASHER 5/16 FLAT SS		
14	86276780	1	SCREW, 5/16-18 X .75 HHCS SS		



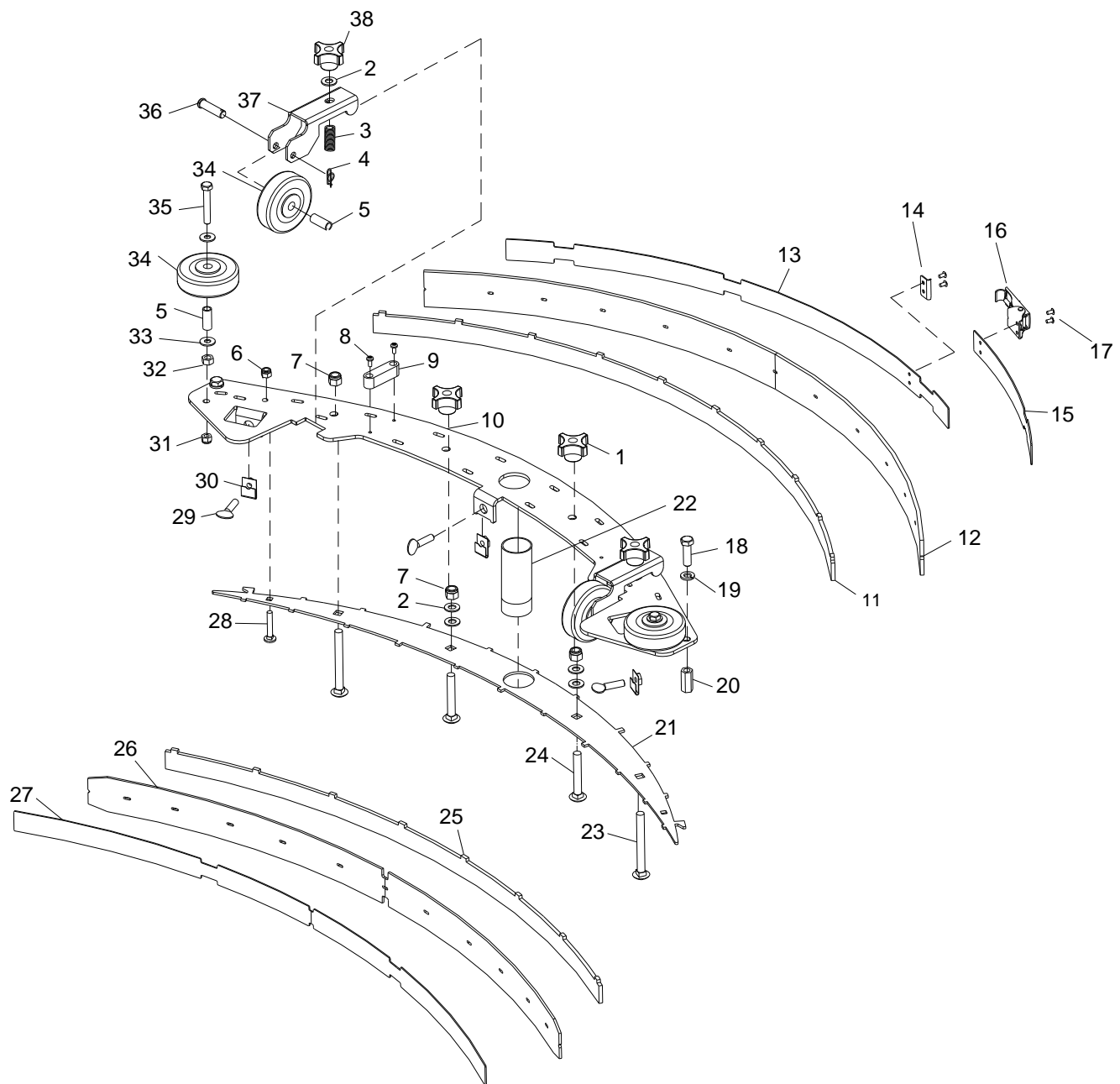
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86282190	1	HOSE, 1/2ID WIRE BOUND X 13"		
2	86233150	3	CLAMP, 3/8 HOSE (D-SLOT)		
3	86007560	1	STRAINER 1/2 HOSE 20 MESH		
-	86005870	1	O-RING SEAL FILTER SEAL RON-VIK		SERVICE ONLY
-	86007750	1	SCREEN, 20 MESH STRAINER SCRBR		SERVICE ONLY
-	86313160	-	CAP, STRAINER SHORT		SERVICE ONLY
4	86273750	2	SCREW, 1/4-20 X .625 HHCS SS NP		
5	86281100	1	HOSE 1/2ID WIRE BOUND X 7"		
6	86010540	1	VALVE 24VDC SOL.1/2"HOSEBARB		
-	86003460	-	PROTECTION PART SRVC PART SLND		SERVICE ONLY
-	86136820	-	SERVICE SLND SPRG KIT		SERVICE ONLY
7	86271870	4	NUT, 1/4-20 HEXTHIN NYLOCK SS		
8	86070380	1	BRKT, FILTER/SOLND SQZ PLAY		
9	86264940	2	CABLE TIE 11.38" UL/CSA		



REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86282220		1	HOSE, 1/4ID NYLOBRD X 19"		
2	86200280		3	HOSEBARB, 3/8 MPT X 1/4 90D		
3	86271830		3	NUT, 3/8-16 LK NYL BLK		
4	86282230		1	HOSE, 1/4ID NYLOBRD X 29"		
5	86282240		1	HOSE, 1/2ID WIRE BOUND X 6"		
6	86001530		1	HOSEBARB, 1/2MPT X 1/2 HOSE 90		
7	86264940		3	CABLE TIE 11.38" UL/CSA		
8	86033220		1	MANIFOLD, SOLUTION FEED SRS		
9	86198010		3	HSBRB, 1/2 MPT X 1/4 HOSE 90 D		
10	86282210		1	HOSE, 1/4ID NYLOBRD X 9"		

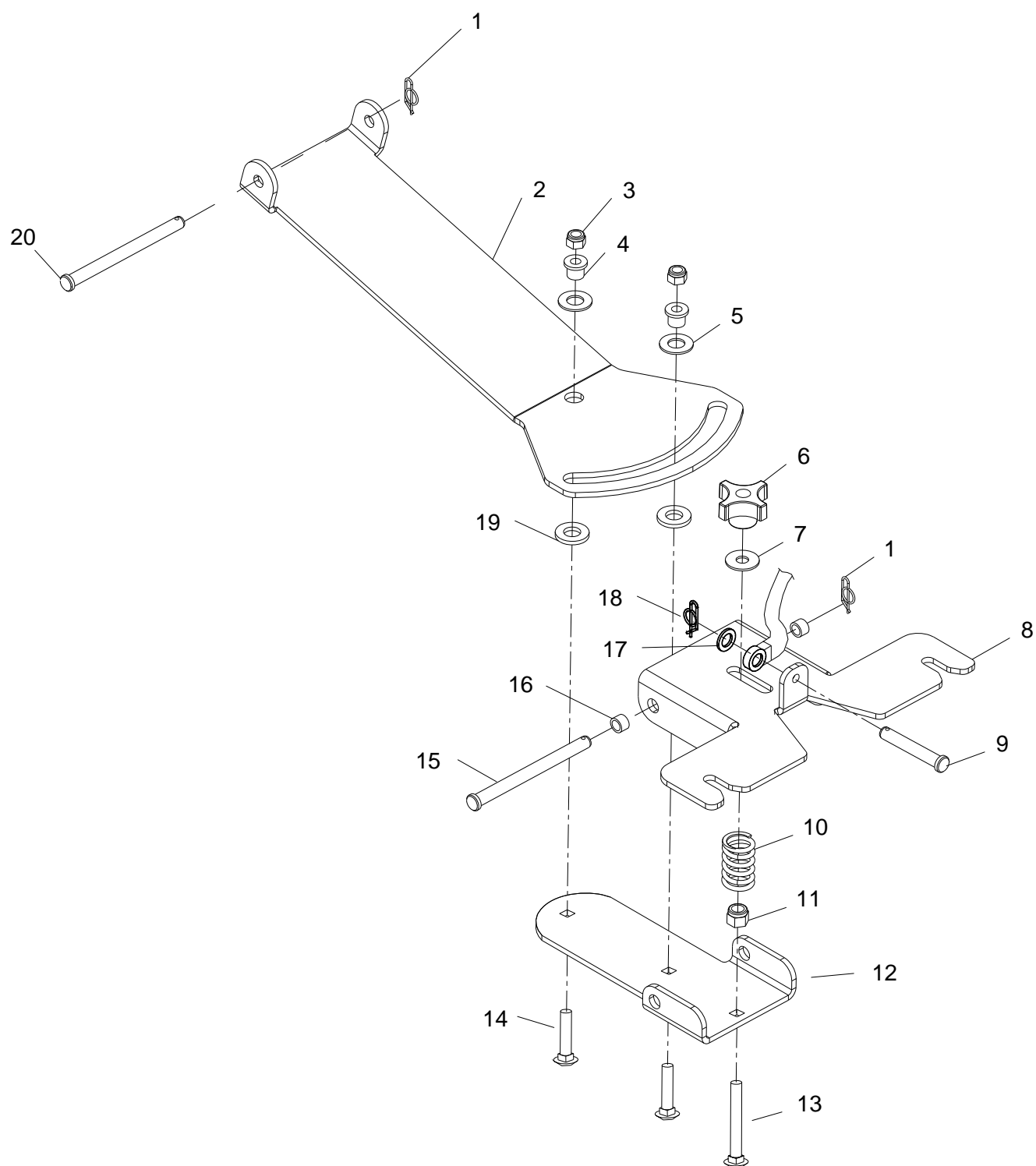


REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86010670		1	WASHER 5/16 FLAT SS		
2	86011020		1	WHEEL 3" DIA CUSHION RUBBER		
3	86001350		1	BUSHING, SPANNER .435 X 1.10		
4	86088000		1	STRAP, SQUEEGEE BLADE FRONT		
5	86004790		2	KNOB, 5/16-18 4 PRONG		
6	86007590		1	FRONT BLADE, SIDE SQZ		
7	86094210		1	SIDE SQG FRAME WELDMENT		
8	86007600		1	SP BACK BLADE, SIDE SQG		
9	86088010		1	STRAP, SQUEEGEE BLADE BACK		
10	86271900		6	NUT, 10-24 HEXTHIN NYLOCK SS		
11	86279750		1	NUT, 5/16 PUSH STL ZNPLT		

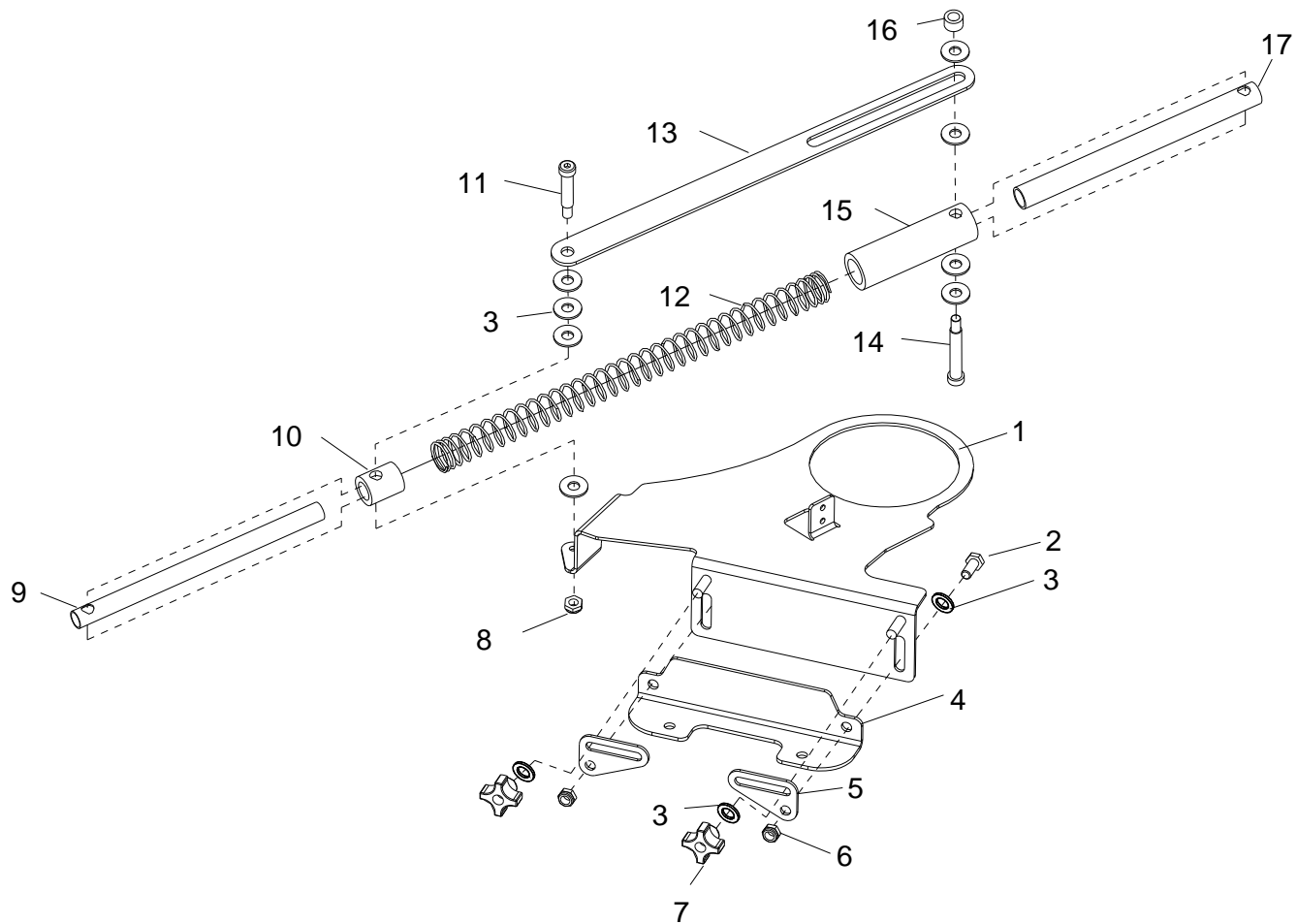


REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86009200	2	KNOB, 3/8-16 4 PRONG ALUM		
2	86010680	6	WASHER, 3/8 FLT NYL		
3	86007780	2	SPRING COMP .60D X 2.0L X .045W		
4	86008660	2	COTTER 5/16 RING		
5	86001350	4	BUSHING, SPANNER .435 X 1.10		
6	86271870	2	NUT, 1/4-20 HEXTHIN NYLOCK SS		
7	86005630	4	NUT, 3/8-16 HEXTHIN NYLOCK SS		
8	86274130	2	SCREW, 8-32 X .375 PHPNHTC		
9	86009910	1	VIAL, LEVEL		
10	86082420	1	PLATE, SQUEEGEE TOP 35"		
11	86082440	1	PLATE, SQG REAR 35"		
12A	86007430	1	SQUEEGEE, REAR BLADE LINTEX		
12B	86137020	1	SQUEEGEE, REAR BLADE URETHANE		
13	86001340	1	BAND, SQUEEGEE REAR		
14	86009180	1	STRIKER, SQUEEGEE STRAP REAR		
15	86001330	1	BAND, SQUEEGEE REAR (S)		
16	86009170	1	LATCH, SQUEEGEE STRAP		
17	86006400	4	RIVET, 5/32 X .062-.125GL POP AL		
18	86276920	2	SCREW, 3/8-16 X 1 HHCS SS NP		
19	86010790	2	WASHER, 3/8 X .680 X .094 SPL STL ZNPLT		
20	86005840	2	NUT, 3/8-16 CPL SS		
21	86082450	1	PLATE, SQUEEGEE BOTTOM 35"		
22	86008390	1	TUBE ASM, SQUEEGEE VAC		
23	86276990	2	SCREW, 3/8-16 X 3.5 CARR SS		
24	86276870	2	SCREW, 3/8-16 X 2.5 CARR SS		
25	86082430	1	PLATE, SQG FRONT 35"		
26A	86008020	1	SQGE BLADE, FRONT LINATEX 35"		
26B	86137030	1	SQUEEGEE, FRONT BLADE URETHANE		
27	86066370	1	BAND, SQUEEGEE FRONT		
28	86277000	2	SCREW, 1/4-20 X 1.5 CARR SS		
29	86007040	3	SCREW, 5/16-18 X 1 THUMB SS		
30	86271820	3	NUT, 5/16-18 X .028-.056PR CAGE		
31	86271840	2	NUT 5/16-18 HEX NYLOCK THIN SS		
32	86005650	2	NUT, 5/16-18 HEX STL ZNPLT		
33	86010670	4	WASHER 5/16 FLAT SS		
34	86011020	4	WHEEL 3" DIA. CUSHION RUBBER		
35	86276980	2	SCREW, 5/16-18 X 2 HHCS SS		
36	86006270	2	PIN, CLEVIS 5/16 X 1.63 PLTD		
37	86069870	2	BRKT, SQG WHEEL		
38	86004890	2	KNOB,ALUM 3/8-16 NYLOCK NUT SS		
-	86026530	-	SQUEEGEE ASM 26 IN SCRUBHEAD		SRVC ASM

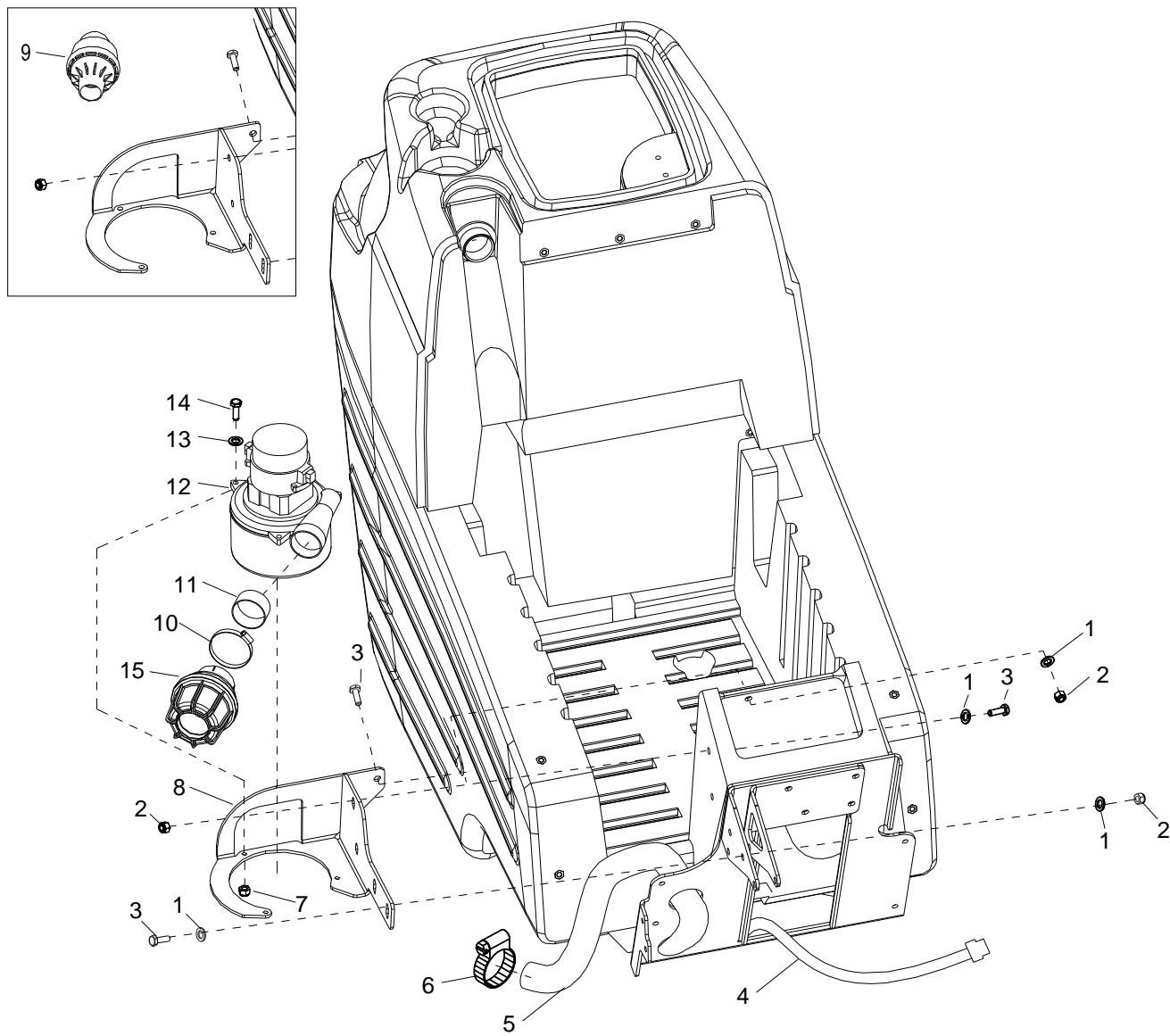
Squeegee Lift Linkage (Lower)



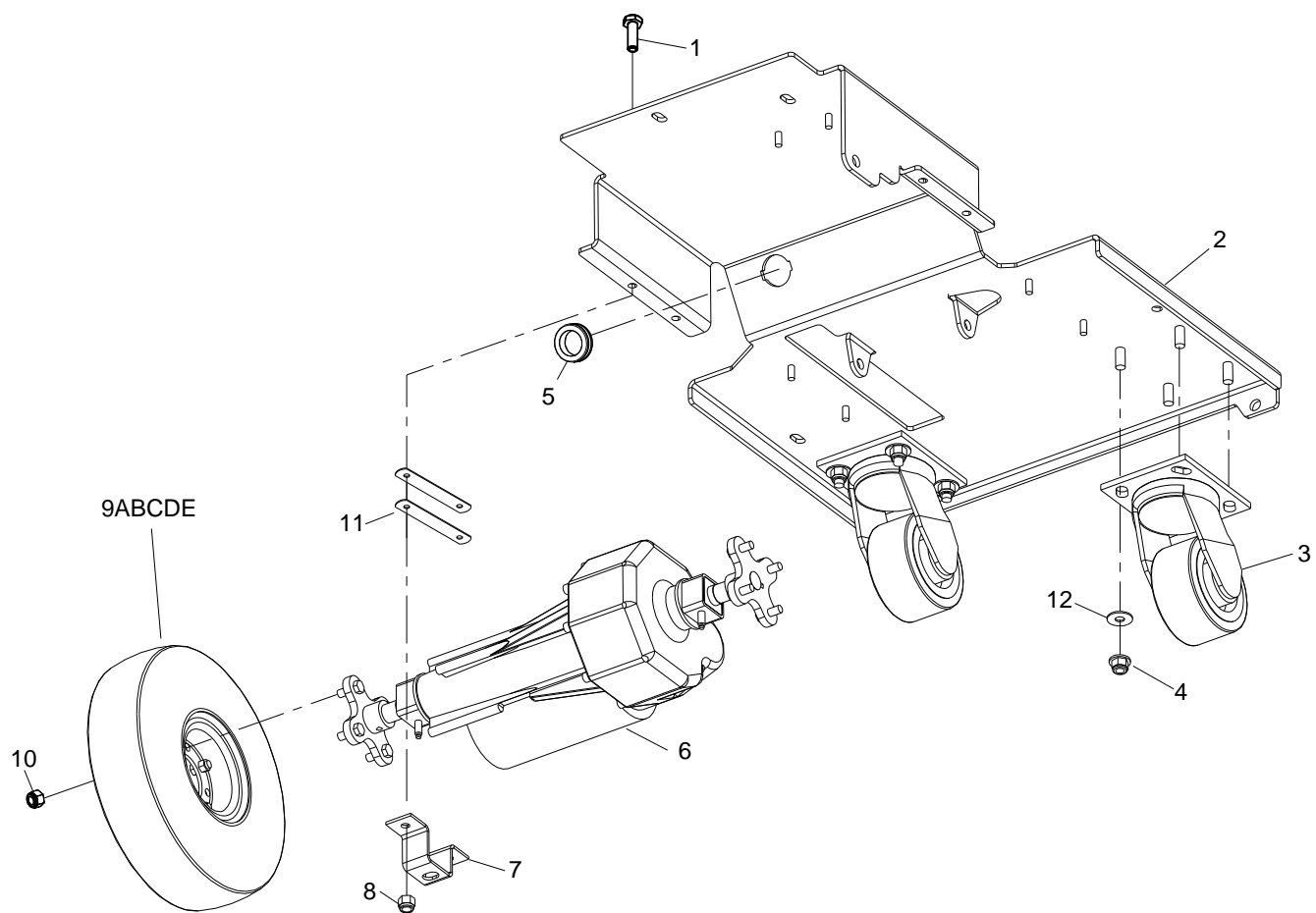
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86008670	2	COTTER, 3/8" RING		
2	86069450	1	BRKT, SQG PIVOT LIFT		
3	86271840	2	NUT 5/16-18 HEX NYLOCK THIN SS		
4	86228840	2	BUSHING, .314 X .502 X .5 FLG		
5	86259420	2	WASHER, .510 X 1 X .093 THR		
6	86009200	1	KNOB, 3/8-16 4 PRONG ALUM		
7	86279510	1	WASHER 3/8 FLAT		
8	86082150	1	PLATE, SQUEEGEE MOUNT		
9	86009560	1	PIN, CLEVIS 1/4 X .625 STL ZNPLT		
10	86007270	1	SPRING COMP 1.100DX2.0LX.148W		
11	86005630	1	NUT, 3/8-16 HEXTHIN NYLOCK SS		
12	86072530	1	BRKT, CAMBER PIVOT		
13	86276870	1	SCREW, 3/8-16 X 2.5 CARR SS		
14	86277130	2	SCREW, 5/16-18 X 1 CARR SS		
15	86249060	1	PIN, CLEVIS 3/8 X 4.625 STL ZNPLT		
16	86008870	2	BUSHING, 3/8 X .688 FLG		
17	86010630	1	WASHER, 1/4 X .625 FLT SS		
18	86008650	1	PIN, COTTER RING 1/4 X .041 X .844		
19	86259400	2	WASHER THRUST.51 ID X 1 ODBRO		
20	86008860	1	PIN, CLEVIS 3/8 X 5.5 STL ZNPLT		



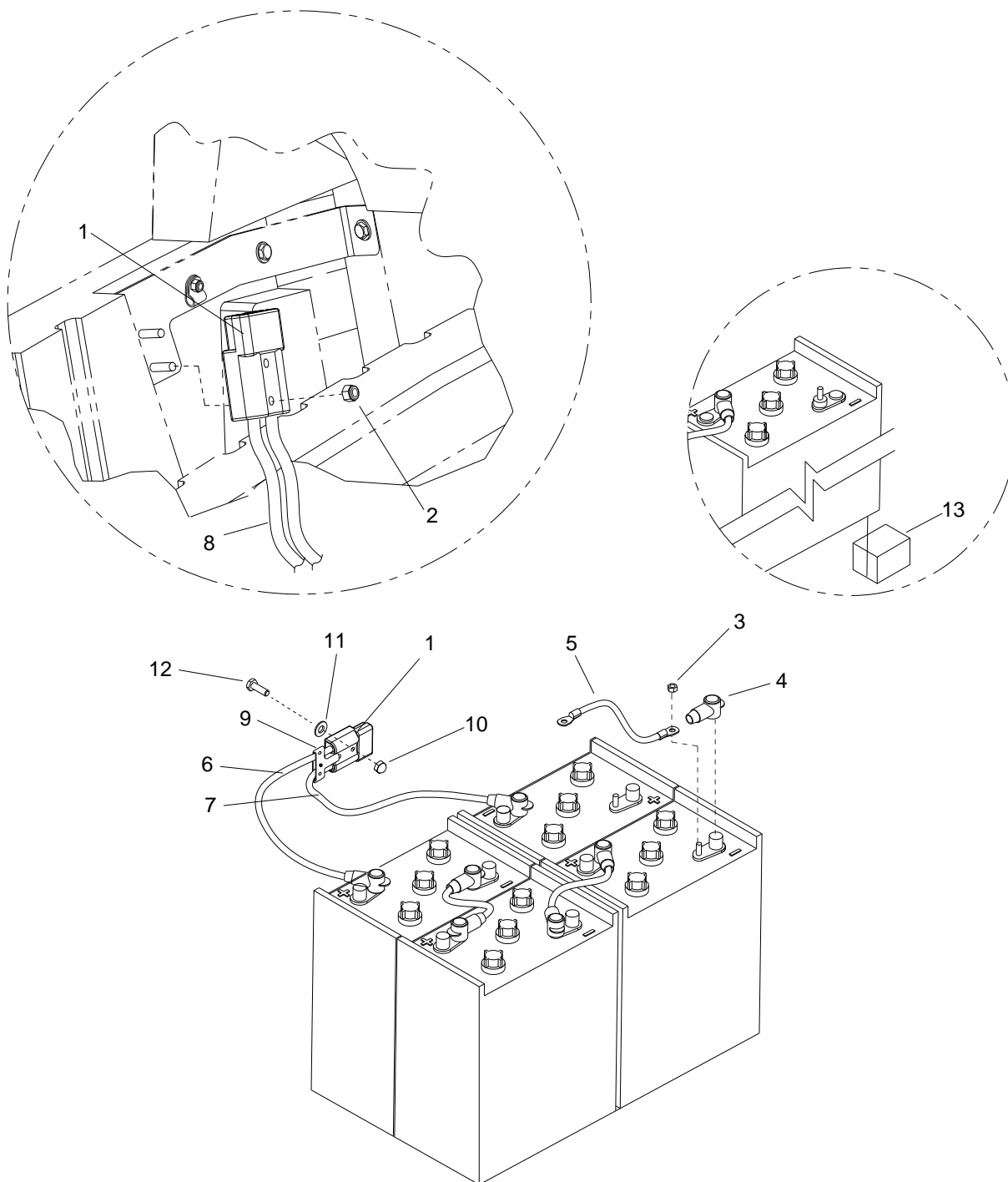
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86070250	1	BRKT, SIDE SQG PIVOT		
2	86276780	2	SCREW, 5/16-18 X .75 HHCS SS		
3	86010670	11	WASHER 5/16 FLAT SS		
4	86077500	1	LINKAGE, SIDE SQG		
5	86082970	2	PLATE, SIDE SQG. ADJ.		
6	86271840	2	NUT 5/16-18 HEX NYLOCK THIN SS		
7	86004790	2	KNOB, 5/16-18 4 PRONG		
8	86271870	2	NUT, 1/4-20 HEXTHIN NYLOCK SS		
9	86089700	1	TUBE, 1/2 OD X .035 WALL, SS		
10	86078480	1	PIPE, 1 1/2 SCH 80 X 1.02, PVC		
11	86278190	1	SHOULDER BOLT, 5/16 X 1.25L STL ZNPLT		
12	86254950	1	SPRING, COMP .875ODX12LX.062W		
13	86066880	1	BAR, SIDE SQG SPRING STRUT		
14	86278370	1	SHOULDER BOLT, 5/16 X 1.75L SS		
15	86078470	1	PIPE, 3/4 SH80 X 3.52, PVC		
16	86224290	1	SPACER, .317ID X .5OD X .44LG		
17	86089690	1	TUBE, 5/8 OD X .058 WALL, SS		



REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86278910	7	WASHER, 3/8 X .875 X .05 FLT SS		
2	86005630	5	NUT, 3/8-16 HEXTHIN NYLOCK SS		
3	86276920	5	SCREW, 3/8-16 X 1 HHCS SS NP		
4	86004250	1	HOSE 1.0 BLK VAC X 8 FT		
5	86001620	1	HOSE ASSEMBLY 1.5 BLK VAC X 67		
6	86002400	2	CLAMP, 2.0" WORM GEAR X .312W		
7	86271870	3	NUT, 1/4-20 HEXTHIN NYLOCK SS		
8	86070370	1	BRKT, VAC MOTOR MOUNT		NOT AVAIL
9	86120190	1	MUFFLER, WALK BEHIND SCRUBBER		
10	86233430	1	CLAMP 2.50 WORM GEAR		
11	86091170	1	TUBE, 2.0 OD X 1.0L		
12	86005460	1	VAC MOTOR ASM, 24VDC 3 STAGE		
-	86230810	-	BRUSH SET, 24V 3ST VAC AMETEK		SRVC ONLY
-	86326980	-	BRUSH SET 24/36V VAC WINDSOR	*(1)	SRVC ONLY
13	86010630	3	WASHER, 1/4 X .625 FLT SS		
14	86273810	3	SCREW, 1/4-20 X 1 HHCS SS		
15	86064910	1	MUFFLER, VAC MOTOR	*(2)	

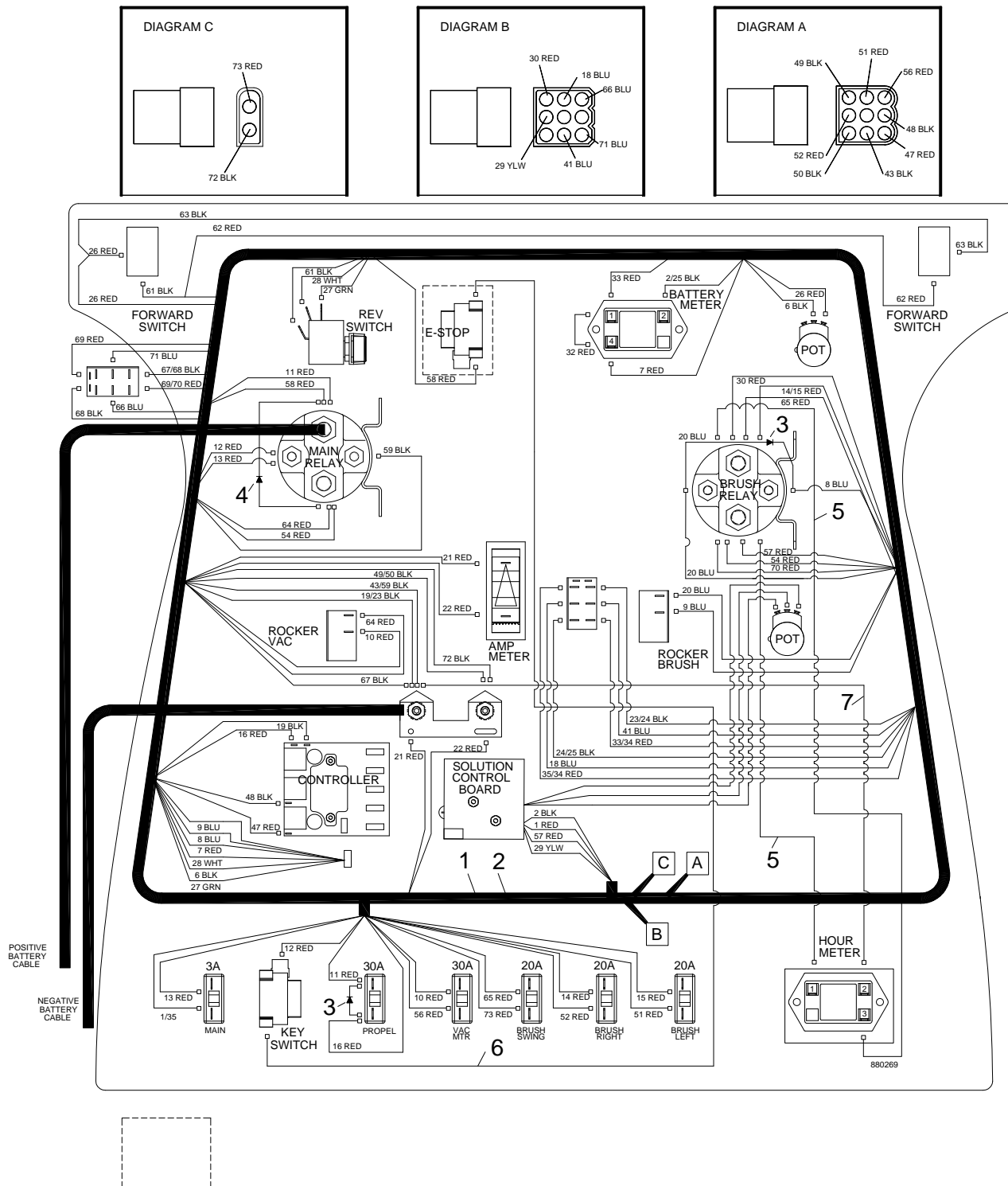


REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86006560	4	SCREW, 5/16-18 X 1 HHCS SS NP		
2	86075870	1	FRAME, MAIN SQZ PLAY		
3	86002310	2	CASTER, 4DIA X 2 W X 3.56 R		
4	86270880	8	NUT, 3/8-16 SERFLG STL ZNPLT		
5	86238430	1	GROMMET 1.00 ID 3/16 GRIP		
6	86000800	1	AXLE MOTOR 24 VDC		
-	86216150	-	BRUSH SET 24V TRANSAXLE		SRVC ONLY
-	OBSOLETE	-	HUB KIT, 05128 TRANSAXLE		SRVC ONLY
-	86241840	-	KEY, WOODRUFF .75 ID HUB		SRVC ONLY
7	86230330	2	BRKT, TRANSAXLE MOUNT		
8	86271840	4	NUT 5/16-18 HEX NYLOCK THIN SS		
9A	86011050	2	WHEEL COMPLETE 10" FMFL BLK KNOBBY		
9B	86137420	-	WHEEL ASM, 10" SOLID SPCL SCBR		OPTIONAL
9C	86011040	-	WHEEL ASM, 10" FMFL N-MARKING		OPTIONAL
9D	86354660	-	WHEEL, 10" BLK KNBY POLY FILL		OPTIONAL
9E	86354670	-	WHEEL, 10" N-MARKING POLY FILL		OPTIONAL
10	86271860	8	NUT, 5/16-24 HEX NYLOCK SS		
11	86081870	4	PLATE, TRANSAXLE SPACER		
12	86278910	8	WASHER, 3/8 X .875 X .05 FLT SS		

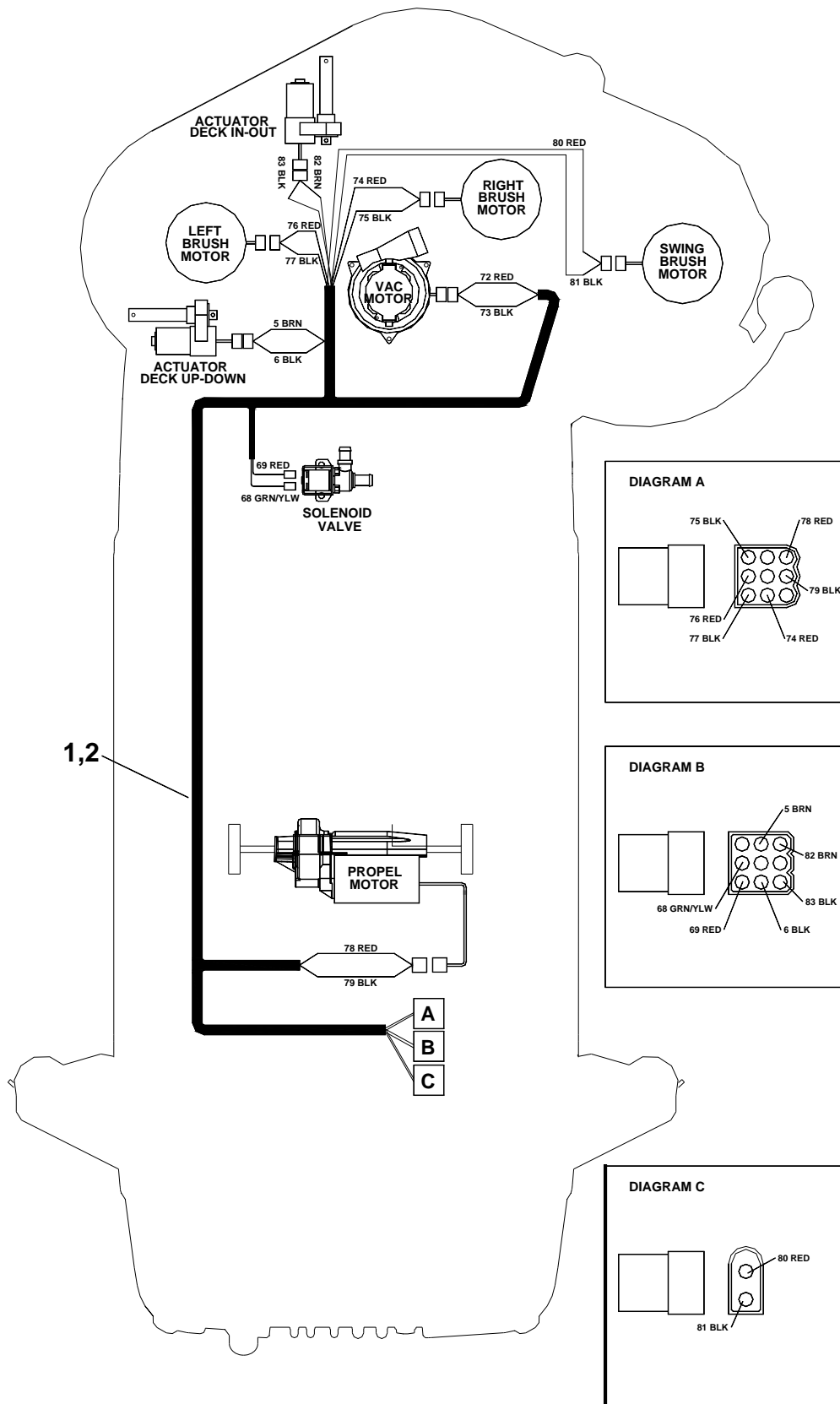


REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86010120	2	CONNECTOR 175 DCA RED W/O TERMS		
2	86271870	2	NUT, 1/4-20 HEXTHIN NYLOCK SS		
3	86271910	8	NUT, 5/16-18 FLEX LK STL GRA CDPLT		
4	86008920	8	BOOT, RUBBER TERM. ISOLATOR		
5	86009000	3	WIRE, 4X9.5BK 5/16RINGX5/16RING		
6	86010850	1	WIRE, 4X20RD CTERM X 5/16RING		
7	86010860	1	WIRE, 4X20 BK CTERM X5/16RING		
8	86260520	2	WIRE, 4X67 BK CTERM X 5/16RIN		
9	86233360	1	CLAMP, CABLE KIT		
10	86270890	1	NUT, 10-32 ACORN STL NKLPLT		
11	86010650	1	WASHER, 10 X .562 X .032 FLT STL PSVT		
12	86273980	1	SCREW, 10-32 X .75 PHPNHMS SS		
13	86312710	1	BLOCK, 3.5 X 4 X 5 FOAM		FOR 86312720 BATTERIES

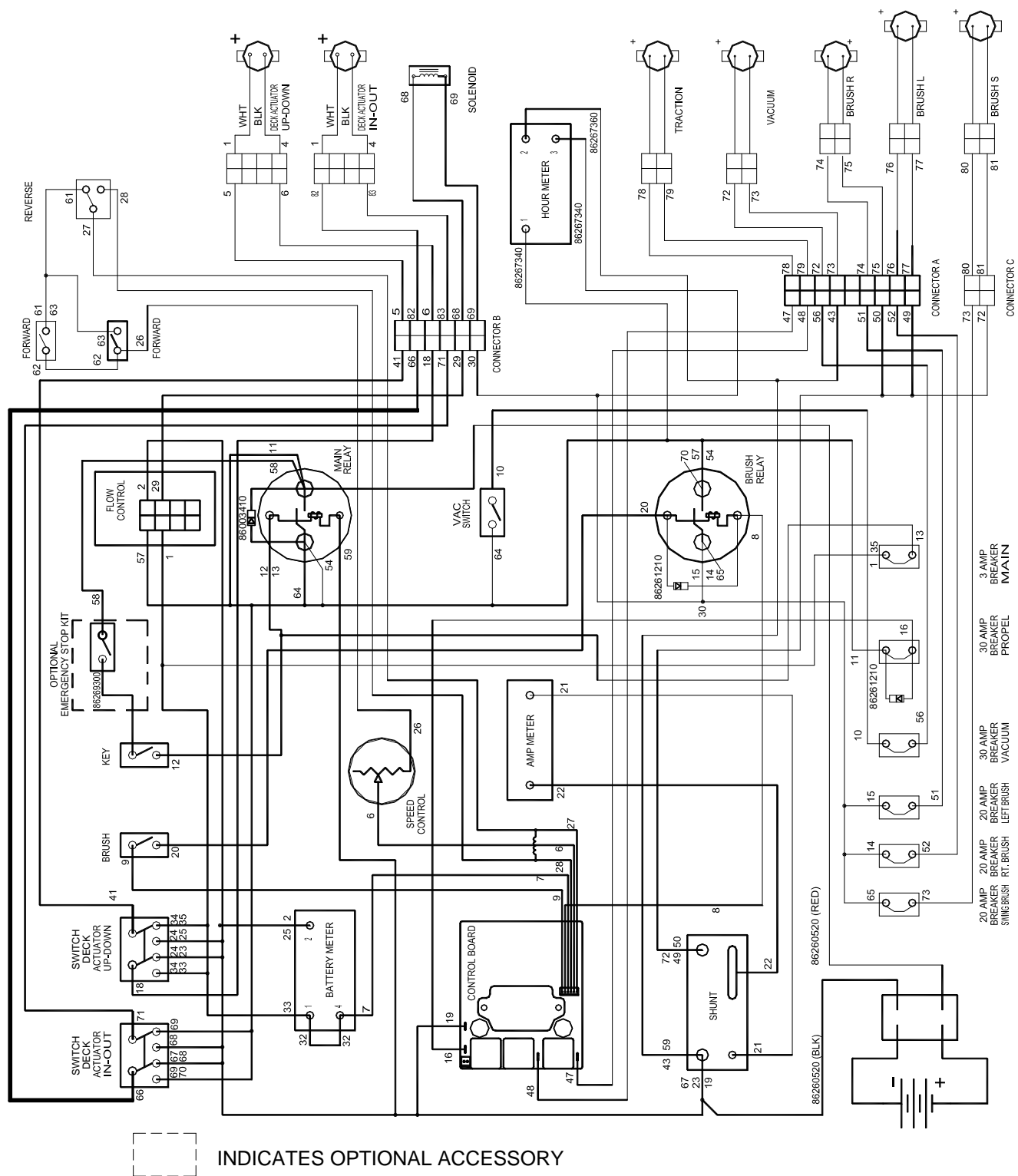
Wiring-Control Panel



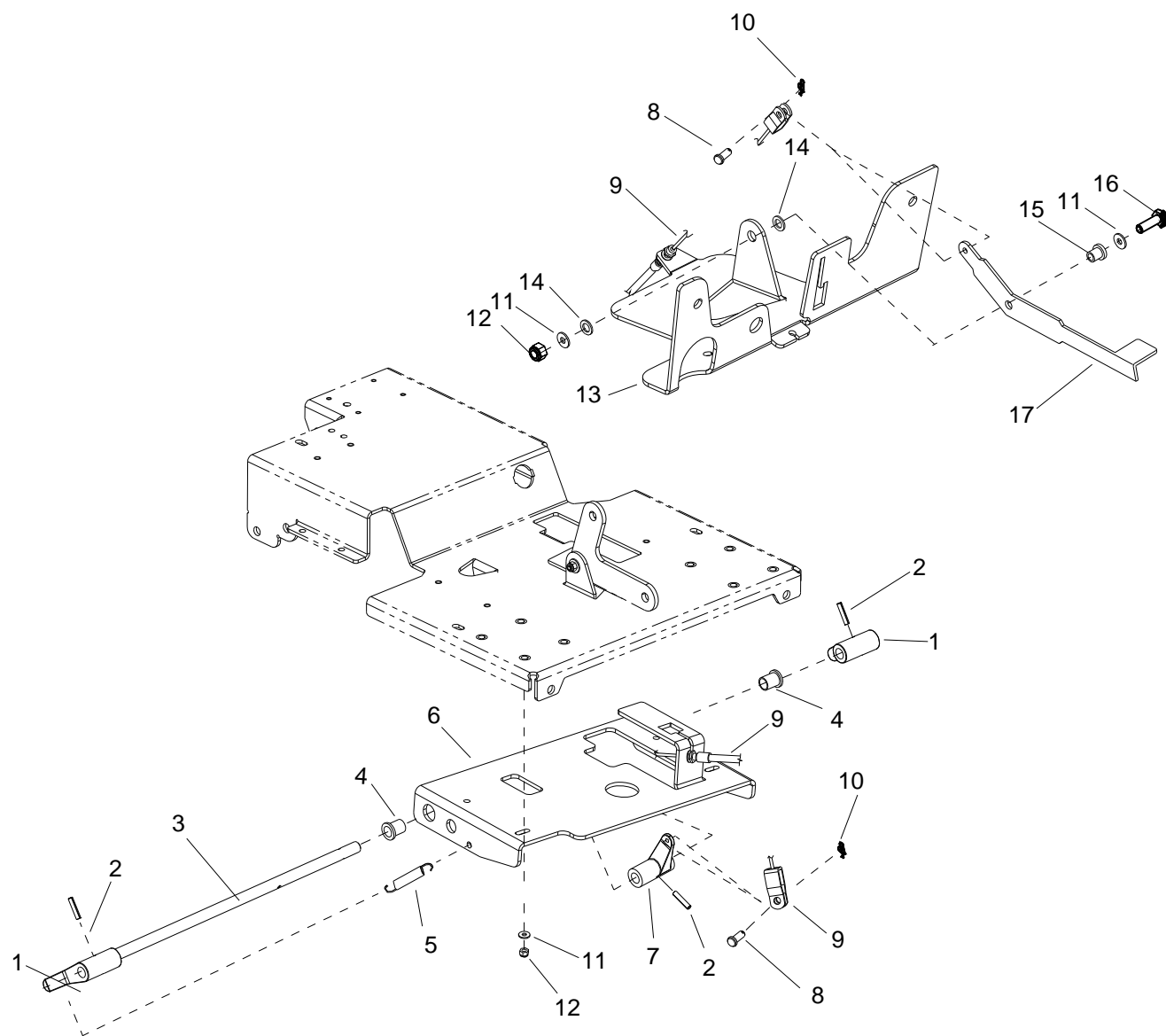
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86239040	1	HARNESS, PANEL CUTTER 36"		
2	86238990	1	HARNESS, PANEL, DELUXE		
3	86261210	2	DIODE ASM, 76008 X 76008		
4	86003410	1	DIODE ASM, 76075 X 76075		
5	86267340	2	WIRE, 22" RED/18 76040 X 76075		
6	86269300	1	WIRE, 16" RED/18 STRIP X STRIP		
7	86267360	1	WIRE, 14" BLK/18 76011 X 76040		



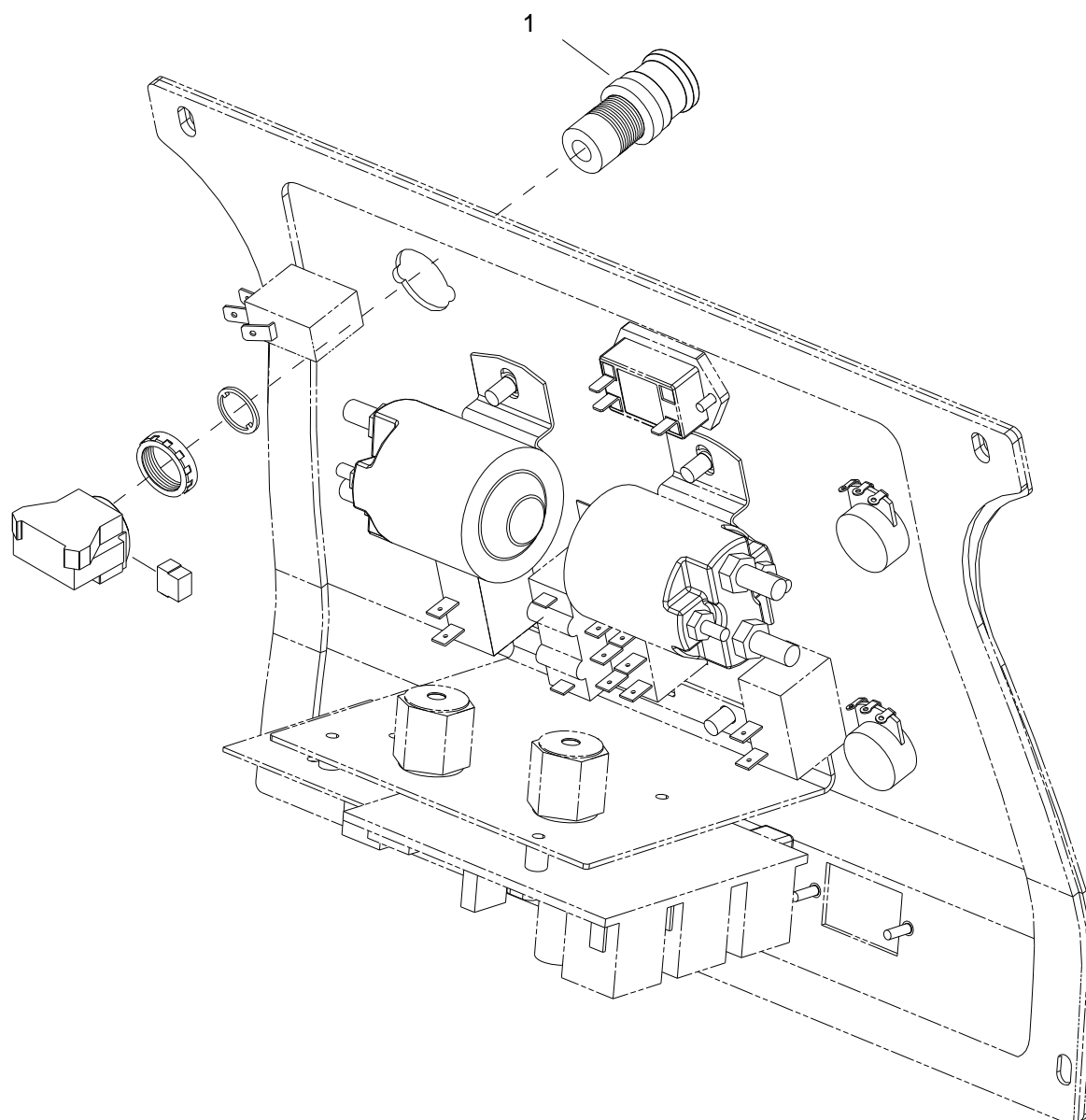
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86239030	1	HARNESS, MAIN CUTTER 36"		
2	86238980	1	HARNESS, MAIN		



OPTIONS



REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86248370	2	PAD, BRAKE		
2	86006220	3	PIN, ROLL 1/4 X 1.25L		
3	86252070	1	ROD, BRAKE 24V		
4	86231330	2	BUSHING, .6270 X .753 X 1 FLG BRZ		
5	86255060	2	SPRING, EXT .43D X2.50L X.047W		
6	86070070	1	BRKT, LOWER BRAKE MOUNT 24V		
7	86234850	1	CRANK, BRAKE		
8	86272610	2	PIN, CLEVIS 5/16 X .75 STL ZNPLT		
9	86231820	1	CABLE, PARK BRAKE		
10	86008660	2	COTTER 5/16" RING		
11	86010630	6	WASHER, 1/4 X .625 FLT SS		
12	86271870	5	NUT, 1/4-20 HEXTHIN NYLOCK SS		
13	86070150	1	BRKT, TANK MOUNT 24V		
14	86259400	2	WASHER THRUST.51 ID X 1 ODBR		
15	86228900	1	BUSHING, .252 X .503 X .75 FLG		
16	86273820	1	SCREW, 1/4-20 X 1.25 HHMS SS		
17	86077280	1	LEVER, BRAKE		



REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES
1	86007180	1	SWITCH EMERGENCY STOP		
2	86269300	1	WIRE, 16" RED/18 STRIP X STRIP		NOT SHOWN

Suggested Spare Parts

PART NO.	DESCRIPTION	SERIAL NO. FROM	NOTES:
86001910	BREAKER, 30A 50VDC		
86230070	BREAKER, 20A THERMAL CIRCUIT		
86002000	BREAKER, 3A		
86230810	BRUSH SET, 24V 3ST VAC AMETEK		
86135310	BRUSH SET, 24V/36V VAC WINDSOR	*(1)	
86006420	RELAY, 24VDC 100A		
86007140	SWITCH, SPST 2-POSITION ROCKER		
86009200	KNOB, 3/8-16 4 PRONG		
86007430	BLADE, SQUEEGEE REAR		
86008020	BLADE, SQUEEGEE FRONT		
86003990	GASKET, DOME		
86236410	FLOAT, VAC SHUT OFF		
86004860	KEY, SWITCH		
86253970	SKIRT, 3.5 X 40 EXT		
86253980	SKIRT, 3.5 X 34 EXT		
86007590	FRONT BLADE, SIDE SQG		
86007600	BACK BLADE, SIDE SQG		
86237650	GASKET, 1-1/2 COMPRESSION		
86004790	KNOB, 5/16-18 4 PRONG		
86004890	KNOB, ALUM 3/8-16 NYLOCK NUT SS		
86006240	PLUG, DRAIN HOSE		
86007170	SWITCH, KEY TWO POSITION		
86007210	SWITCH, DPDT 3-POSITION ROCKER		
86257030	SWITCH, MOMENTARY DPST		
86257080	SWITCH, DPDT ROCKER W/ PADDLE		
86007560	STRAINER, 1/2 HOSE 20 MESH		
86254930	SPRING, GAS 9.6 300 NEWTONS		
86004180	HOSE, 1.5 BLK VAC X 28"		
86004250	HOSE, 1.0 BLK VAC X 8 FT		
86010540	VALVE, 24VDC SOL 1/2" HOSEBARB		
86011020	WHEEL, 3" DIA CUSHION RUBBER		

REF. NO.	MODEL: SERIAL #
1	1000122411
2	1000122451
3	10052410000076